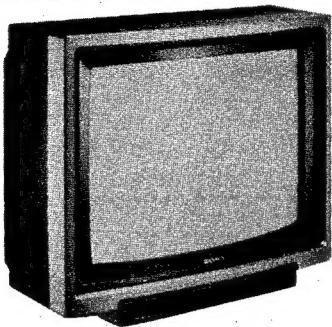
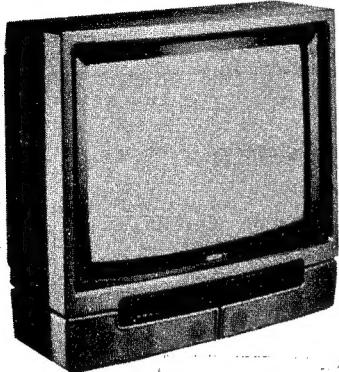


KV-2720/22/24EC2

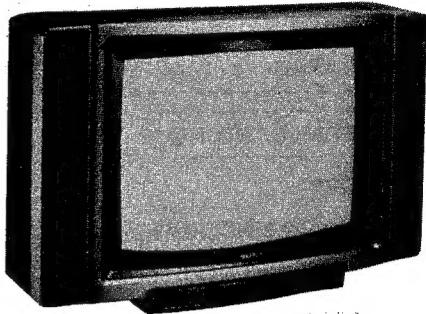
ADJUSTMENT MANUAL

AEP Model

Chassis No. SCC-522A-A



KV-2720EC2



March, 1984

PE-3 CHASSIS

Please use the Adjustment Manual
in conjunction with the Service Manual.

TABLE OF CONTENTS

1. SETUP ADJUSTMENTS	
1-1. Beam Landing.....	2
1-2. Convergence.....	3
1-3. White Balance.....	3
1-4. Focus	3
2. CIRCUIT ADJUSTMENTS	
2-1. D1 Board Adjustments.....	5
2-2. A Board Adjustments.....	7
2-3. SCM Board (Optional) Adjustment.....	8
2-4. D Board Adjustments.....	9



TRINITRON® COLOR TV
SONY®

CTV

SECTION 1 SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

- (picture) control maximum
(Press ● + button)
- ☀ BRIGHTNESS control maximum
(fully clockwise)
- AFT switch ON

1-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

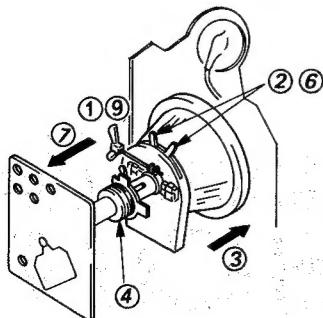
1. Loosen deflection yoke screw.
2. Adjust purity control as shown in Fig. 1-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 1-2.
5. Disconnect leads G and B on the C board.
6. Adjust purity control to center vertical red band as shown in Fig. 1-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.

To get a uniform green screen,
connect lead G on the C board and
disconnect leads R and B.

To get a uniform blue screen,
connect lead B on the C board and
disconnect leads R and G.

After these checks, connect the leads R, G and B.

9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a - d as shown in Fig. 1-4. If mislanding is observed, correct it as shown in Fig. 1-4.
11. Confirm that beam landing is correct when the receiver is faced in all directions.



Note: The circled numbers (1-9) show above steps.

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser

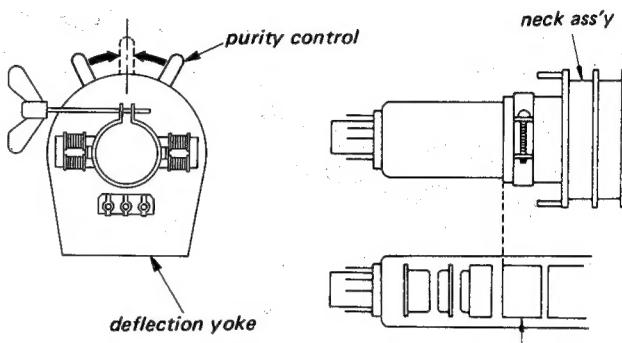


Fig. 1-1.

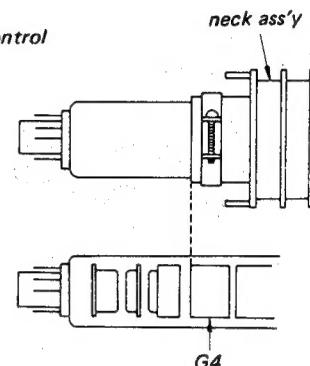


Fig. 1-2.

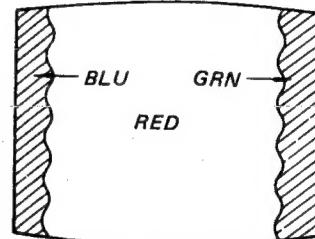


Fig. 1-3.

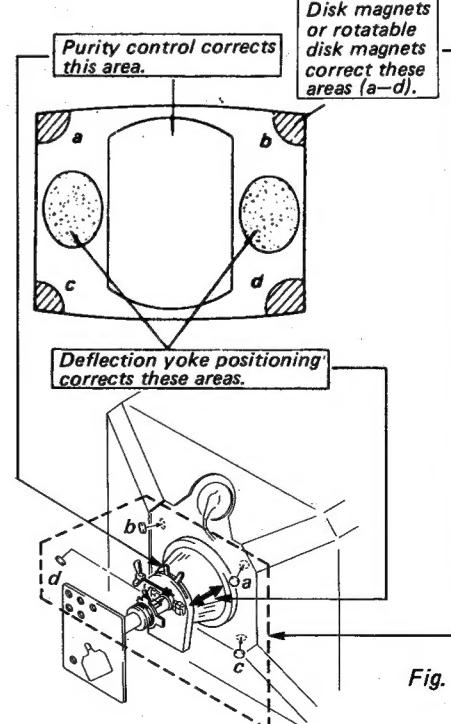


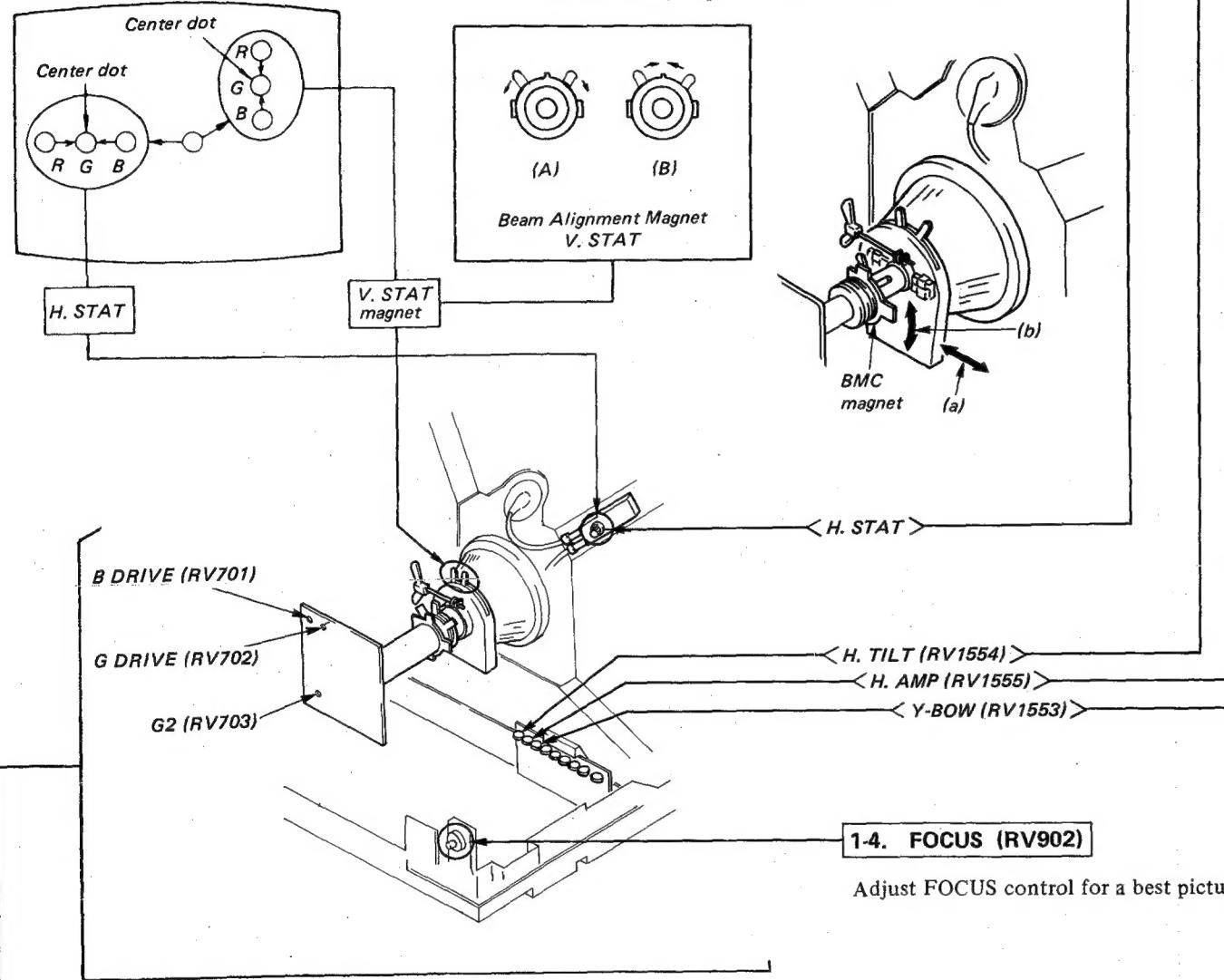
Fig. 1-4.

1-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Turn BRIGHTNESS control fully counterclockwise.
- Feed in a dot pattern.

(1) Horizontal and Vertical Static Convergence



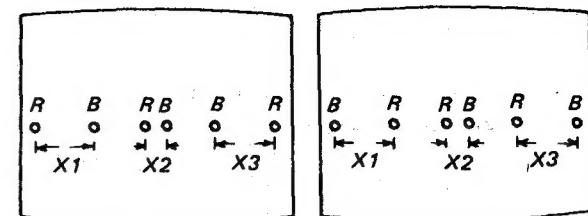
1-3. WHITE BALANCE

1. Tune in an off air signal.
2. Set the (BRT) control at mechanical center and (PIC) control at initial center.
3. Set the (COL) control at minimum.
4. Adjust White Balance with RV701 and RV702.
5. Confirm that White Balance does not change to turn the (BRT) control minimum through maximum.

(2) Dynamic Convergence

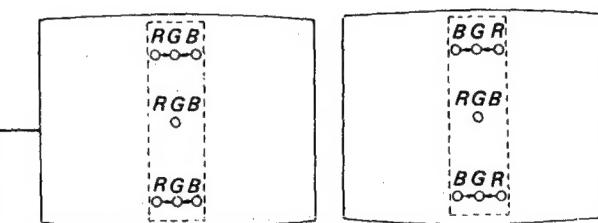
[Misconvergence at Both Sides of Screen.]

1. Set RV1555 and RV1554 to mechanical center.
2. Adjust H. STAT control so that green and blue dots coincide at center of screen.
3. Adjust RV1544 so that X1 is equal to X3.
4. Adjust RV1555 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

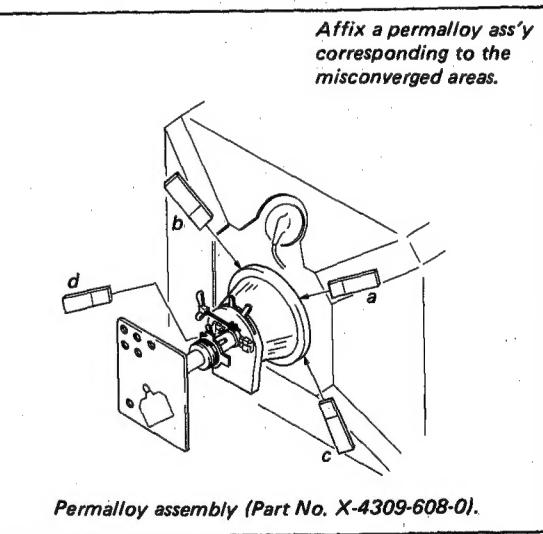
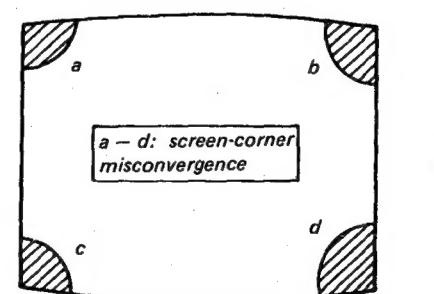


[Top and Bottom Misconvergence]

(A)



(3) Screen-corner Convergence



SECTION 2 CIRCUIT ADJUSTMENTS

2-1. D1 BOARD ADJUSTMENT

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Digital multimeter
3. Color-bar/pattern generator

(2) INPUT SIGNAL

When making these adjustments, supply a color-bar or an off-air signal.

(3) CONTROL SETTINGS

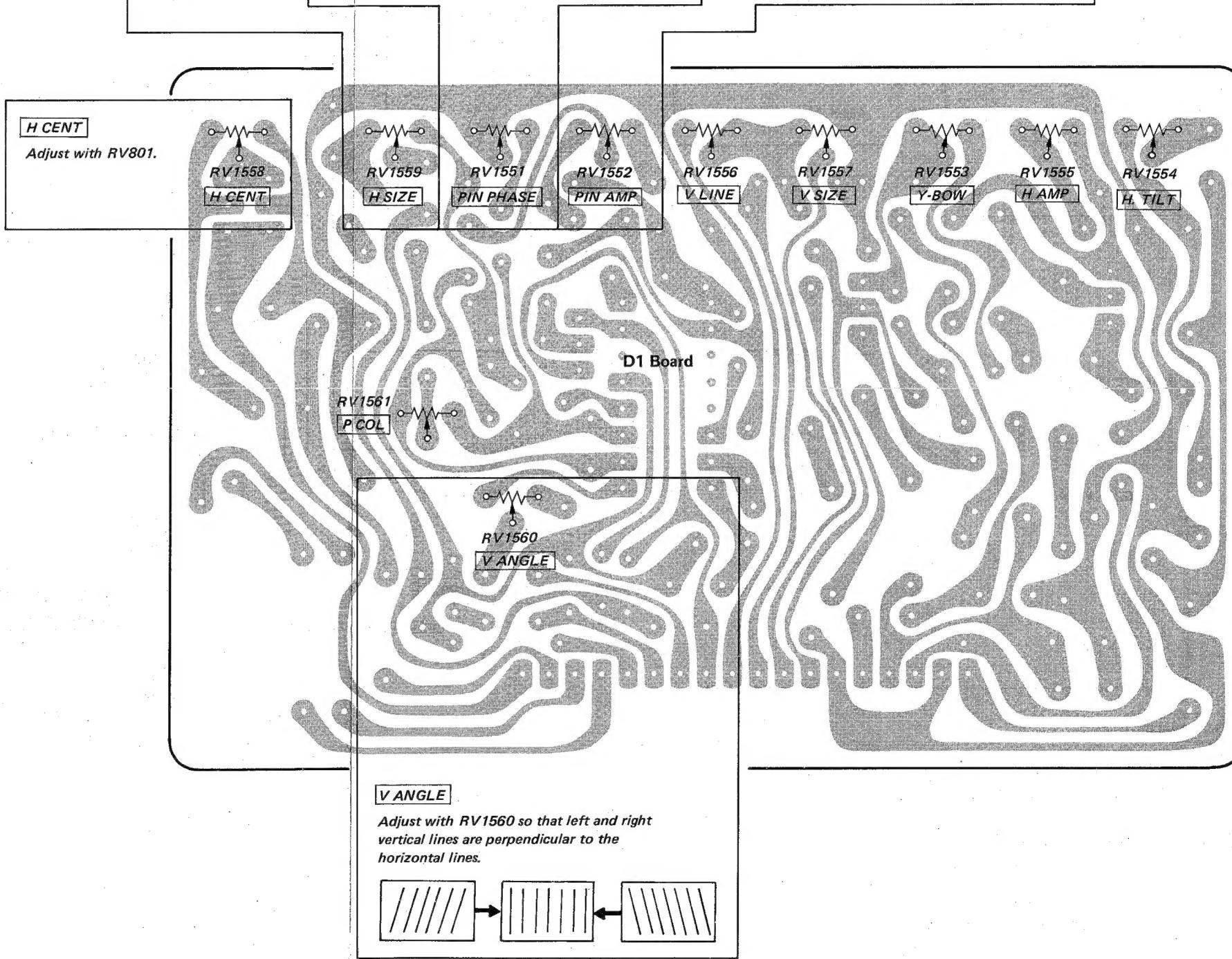
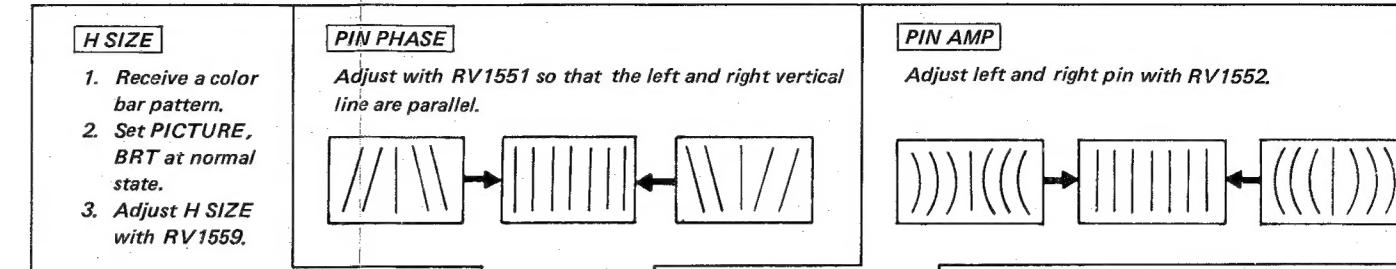
Controls and switches should be set as follows when, making checks and adjustments unless otherwise noted.

PICTURE control initial setting
 BRIGHTNESS control } mechanical center
 COLOR control }

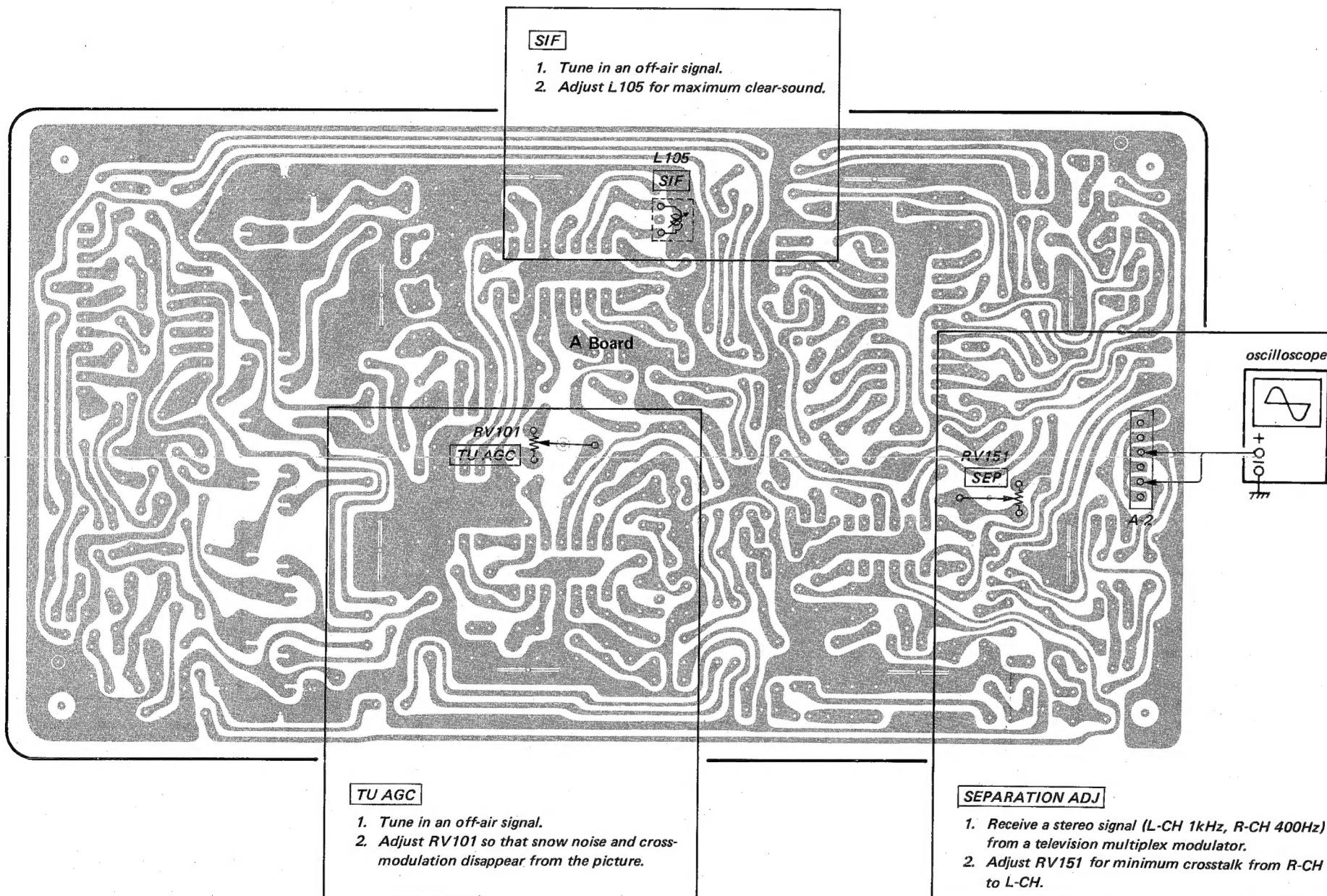
(4) These adjustment should be performed with the rated power supply voltage unless otherwise noted.

(5) CIRCUIT ADJUSTMENT

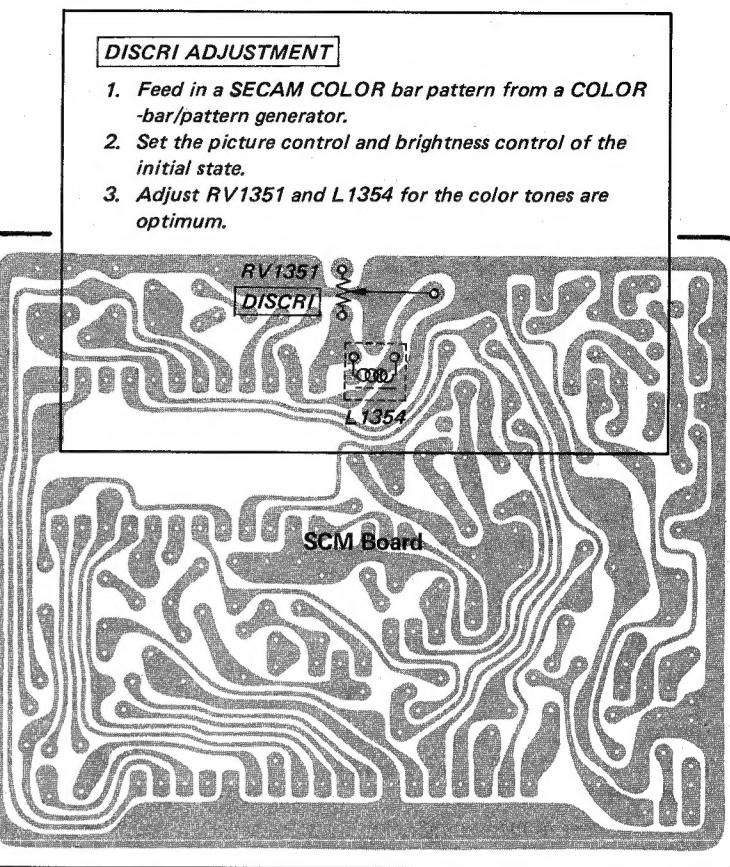
Adjustment	Circuit Board	Page
H SIZE PIN PHASE PIN AMP H CENT V ANGLE	D1	5, 6
SIF TU AGC SEPARATION	A	7, 8
DISCRI	SCM	8
1H DALAY 4.43MHz TRAP SUB-BALANCE SUB-BRIGHT APC SUB COLOR +135V ADJ HORIZONTAL SYNC	D	9, 10



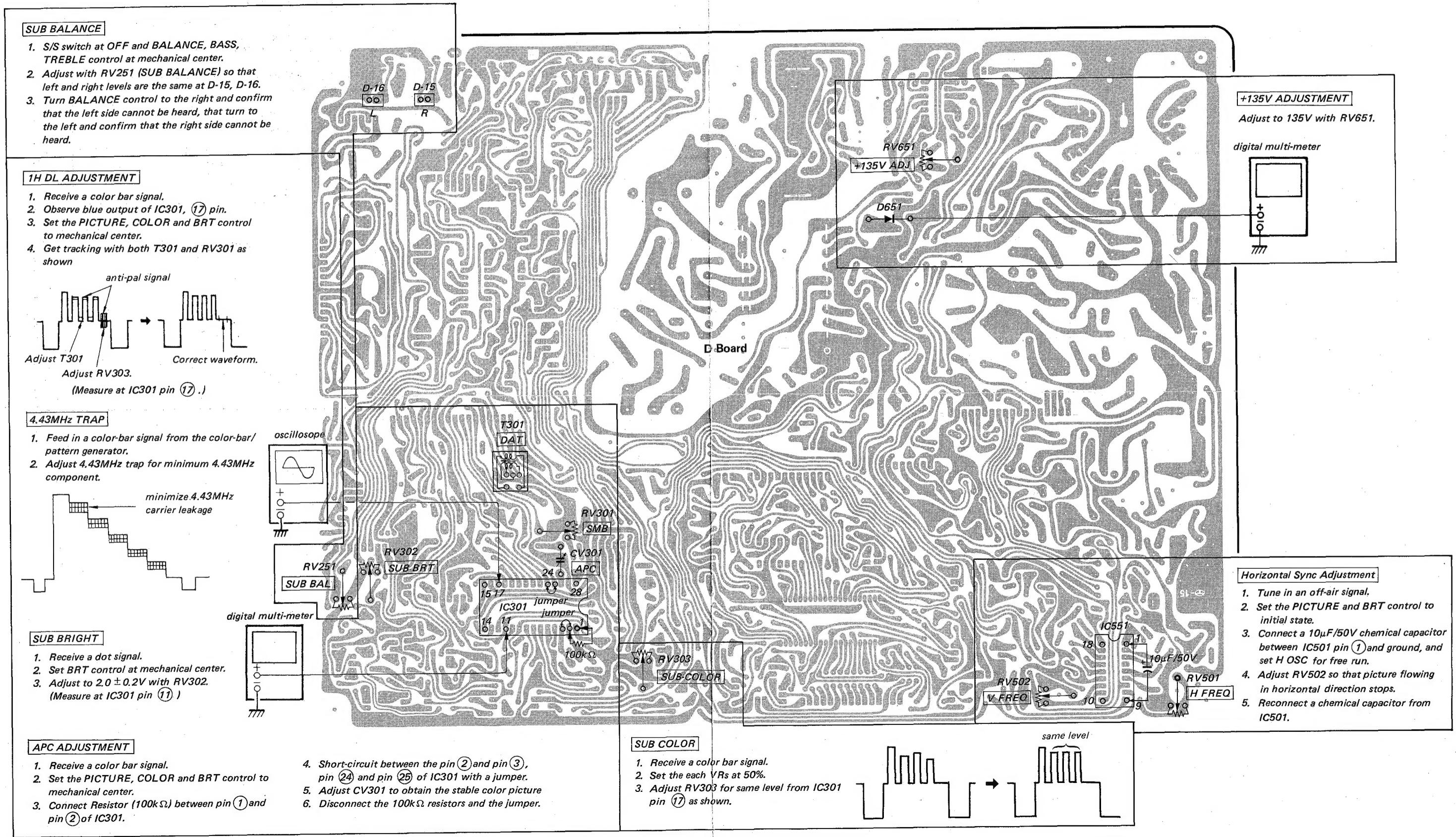
2-2. A BOARD ADJUSTMENTS



2-3. SCM BOARD (OPTIONAL) ADJUSTMENT

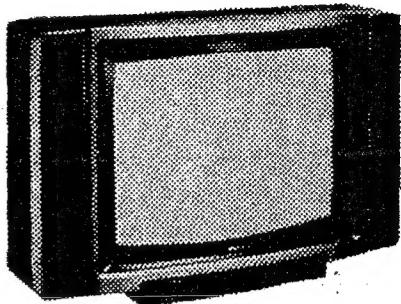
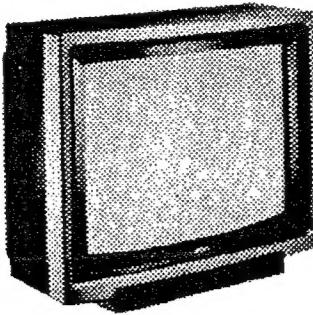


2-4. D BOARD ADJUSTMENTS



KV-2720

SERVICE MANUAL



AEP Model
Chassis No. SCC-522A-A

PE-3 CHASSIS

November, 1983

SPECIFICATIONS

Television system:	CCIR TV standards (system B, G and H)
Color system:	PAL
STEREO system:	Two-carrier system
Channel coverage:	VHF channels E2-U20 UHF channels E21-E68
Programming system:	30 programs Automatic programming digital tuning
Picture tube:	approx. 68 cm (27 inches), approx. 64 cm screen measured diagonally 114-degree deflection Trinitron system
Antenna:	75-ohm standard antenna socket (DIN 45325/IEC 168-2)
Audio output:	20 W + 20 W (music power)
Input:	21-pin connector in accordance with the requirements of CENELEC standard
Outputs:	Audio output connector (5-pin DIN) Recording output: 1 mVrms/kilohm Line output: variable, 0-2 Vrms (max.) impedance less than 1 kilohm External speaker terminals (2-pin DIN) For 8-ohm speakers Headphones socket for 32-ohm impedance headphones
Power requirements:	220-240 V ac, 50 Hz
Power consumption:	series: 132 W

Accessories supplied:	Remote Commander RM-634 (1) Only for the bolt (4). wrench (1)
Speakers supplied with the	
System:	2-way speaker system
Units:	Woofer: 8.5 cm, cone type Tweeter: 5 cm, cone type
Nominal impedance:	8 ohms
Power handling capacity:	15 W (max.)

Design and specifications subject to change without notice.



MICROFILM

TRINITRON® COLOR TV
SONY®

CTV

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED
DURING ANY SERVICE TO AVOID POSSIBLE SHOCK
HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CON-
NECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK
 ON THE SCHEMATIC DIAGRAMS, EXPLODED
VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
SAFE OPERATION. REPLACE THESE COMPONENTS
WITH SONY PARTS WHOSE PART NUMBERS APPEAR
AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS
THAT ARE CRITICAL TO SAFE OPERATION ARE
IDENTIFIED IN THIS MANUAL. FOLLOW THESE PRO-
CEDURES WHENEVER CRITICAL COMPONENTS ARE
REPLACED OR IMPROPER OPERATION IS SUSPECTED.

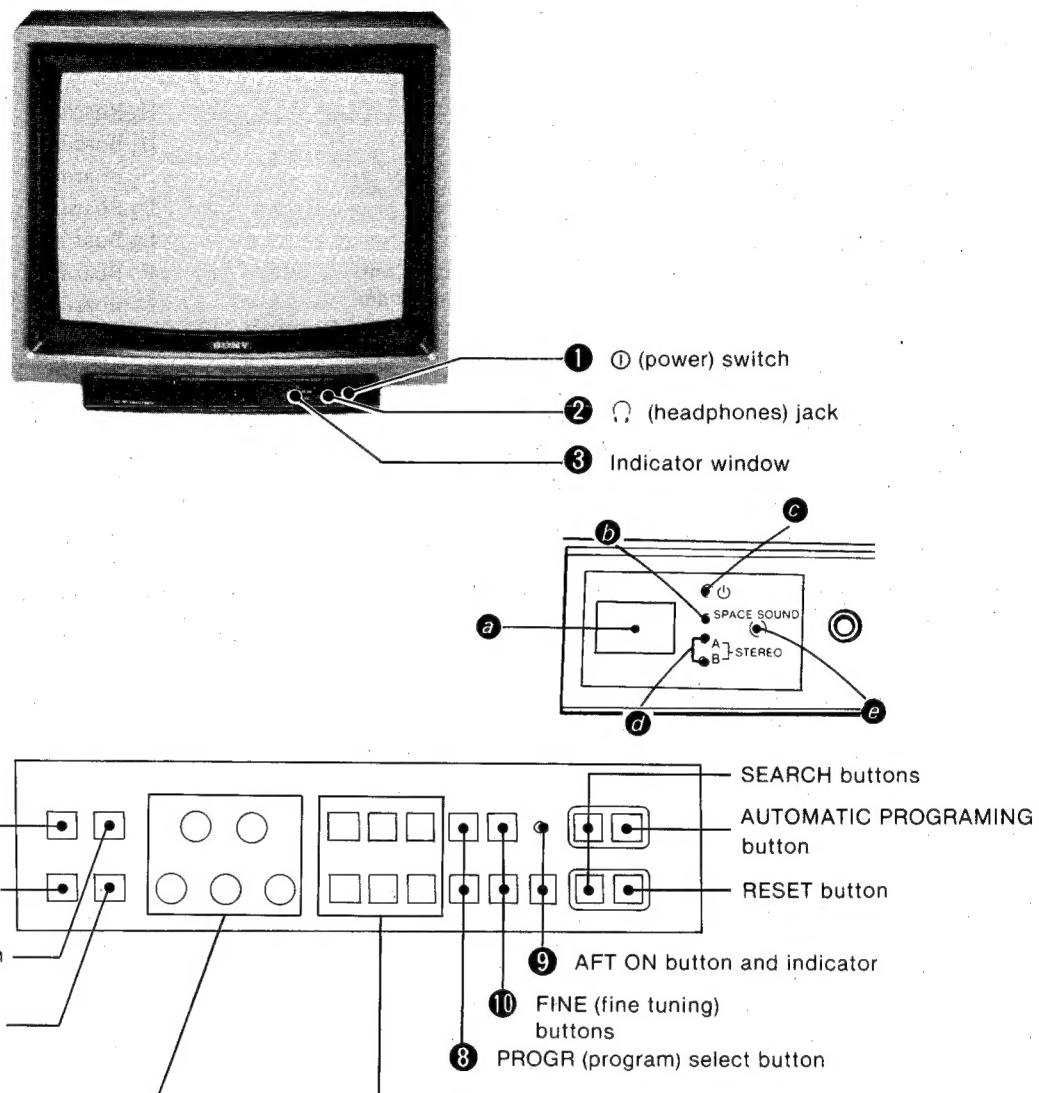
TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL					
1-1.	Location and Function of Controls	4			
1-2.	Connections	6			
2. DISASSEMBLY					
2-1.	Back Cover Removal	7			
2-2.	Picture Tube Removal	7			
2-3.	Bezel Ass'y	8			
2-4.	A Board Removal	8			
2-5.	OPK-203 BOARD ATTACHING	9			
2-6.	Before Installing the OPK-202 Unplug Thplug Set from the Wall Outlet	12			
3. DIAGRAMS					
3-1.	Block Diagram	13			
3-2.	Circuit Boards Location	16			
3-3.	Schematic Diagram	17			
3-4.	Printed Wiring Boards				
	D Board	23			
	A Board	25			
	J ₁ Board	26			
	N Board	26			
4. EXPLODED VIEWS					
4-1.	Bezel	32			
4-2.	Cabinet	33			
4-3.	A Board	34			
5. ELECTRICAL PARTS LIST					
SS-2722/2724 SPEAKERS SYSTEM					49
RM-635 REMOTE COMMANDER					55

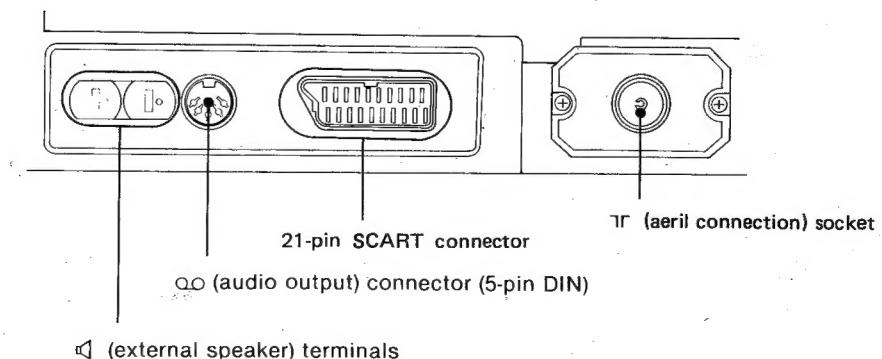
SECTION 1 GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS

On the front panel



On the rear panel



① ① (power) switch

Press to turn the TV on. Press again to turn the power off.

② ② (headphones) jack

Connect stereo headphones here. Speaker sound will be disconnected. If your stereo headphones have a stereo miniplug, use an optional plug adaptor. To hear the sound from the speakers, disconnect the headphones.

③ Indicator window

a Program indicator

b SPACE SOUND indicator

c ④ (standby) indicator

Lights up when the TV is turned off with the Remote Commander. When any of the buttons on the Remote Commander is pressed, this lamp blinks.

d Zweiton/STEREO indicators

When a dual-sound program is received, A or B lights up.

When a stereo program is received, both indicators light up.

e Remote control detector

Point the infrared transmitter of the supplied Remote Commander here.

④ ZWEITON button

When a dual-sound program is received, select the language.

⑤ MONO/STEREO

Normally set this switch to the depressed STEREO position.

Stereo programs can be received. If a stereo program has too much noise, press and release this switch (MONO position). The noise will be reduced, although the stereo feature will be lost.

⑥ TV/VIDEO select button

When playing back a video tape recorder without a 6-pin DIN connector, press this button so that "AV" lights in the program indicator. (When playing back a recorder with a 6-pin DIN connector, the video mode is automatically selected.)

⑦ SPACE SOUND button

Press to get special acoustic effects (for example, more presence). The SPACE SOUND indicator will illuminate. To disengage, press it again.

⑧ PROGR (program) select buttons

Press either + or - to select a preset program (from positions 1 through 30). Press + for higher numbered programs, and - for lower numbered programs. Programs will be changed continuously in sequence. The selected program number will appear on the program indicator.

⑨ AFT (automatic fine tuning) ON button and indicator

When the AFT circuit activates, the indicator illuminates.

Press the AFT ON button to restore the AFT on the channel which has been fine-tuned manually with the FINE buttons. After the automatic programming is finished, or after a station is tuned and memorized in the manual programming system, the AFT circuit will automatically reactivate.

⑩ FINE (fine tuning) buttons

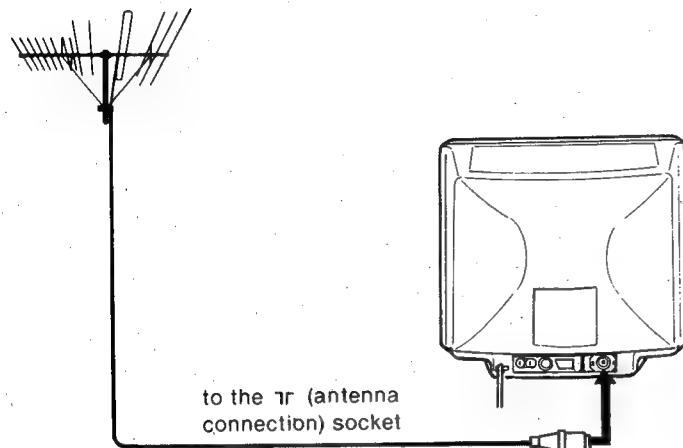
Keep either + or - depressed to get a clear picture for each unsatisfactory channel. The AFT circuit will be automatically deactivated.

1-2. CONNECTIONS

ANTENNA CONNECTION

Good picture and sound are obtained when a proper antenna is used. Your TV receiver is equipped with a standard antenna connection socket, which is effective for both VHF and UHF reception. Use a coaxial antenna connection cable equipped with a single plug, and insert the plug into the 7F (antenna connection) socket of your TV.

TV antenna

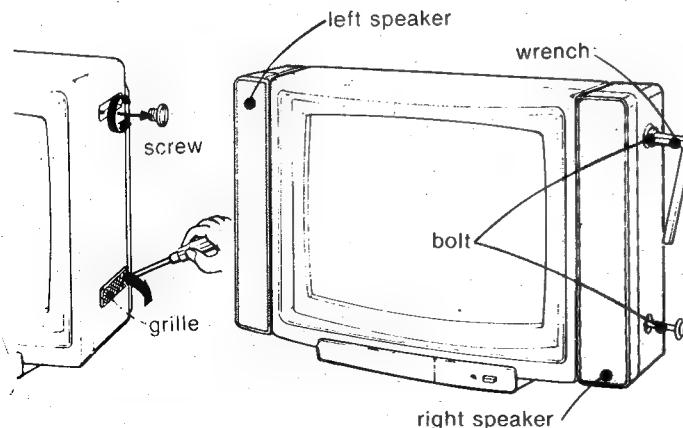


When a video tape recorder is to be connected to the 7F socket of the TV, connect an antenna to the recorder, as explained on page 11.

KV-2722EC

Remove the screws and grilles on both sides of the TV using a screwdriver or similar and attach the supplied left and right speakers by tightening the supplied bolts with the supplied hexagonal wrench.

- The left and right speakers can be distinguished by the label at the rear of each speaker.



You can connect an external speaker system or an amplifier in the same way as the above example of KV-2720EC. If you connect an external speaker system, the attached speaker system is disconnected.

SPEAKER CONNECTION

KV-2720EC

The KV-2720EC is not equipped with speakers.

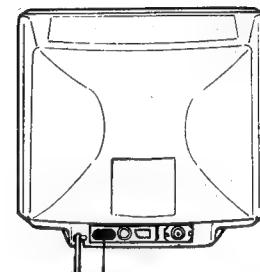
Attach an optional SS-2722 (the same as the speakers supplied with the KV-2722EC) or SS-2724 (the same as the speakers supplied with the KV-2724EC) speaker system, or connect external 8-ohm speakers to the \square terminals at the rear.

ex. External speaker connection

Right speaker

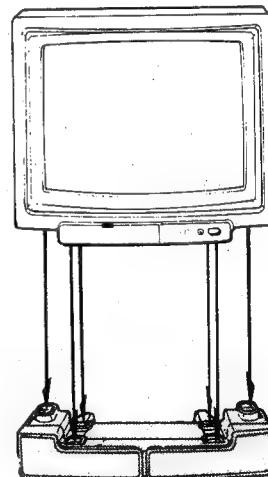


Left speaker



KV-2724EC

Place the TV on the supplied speaker system.



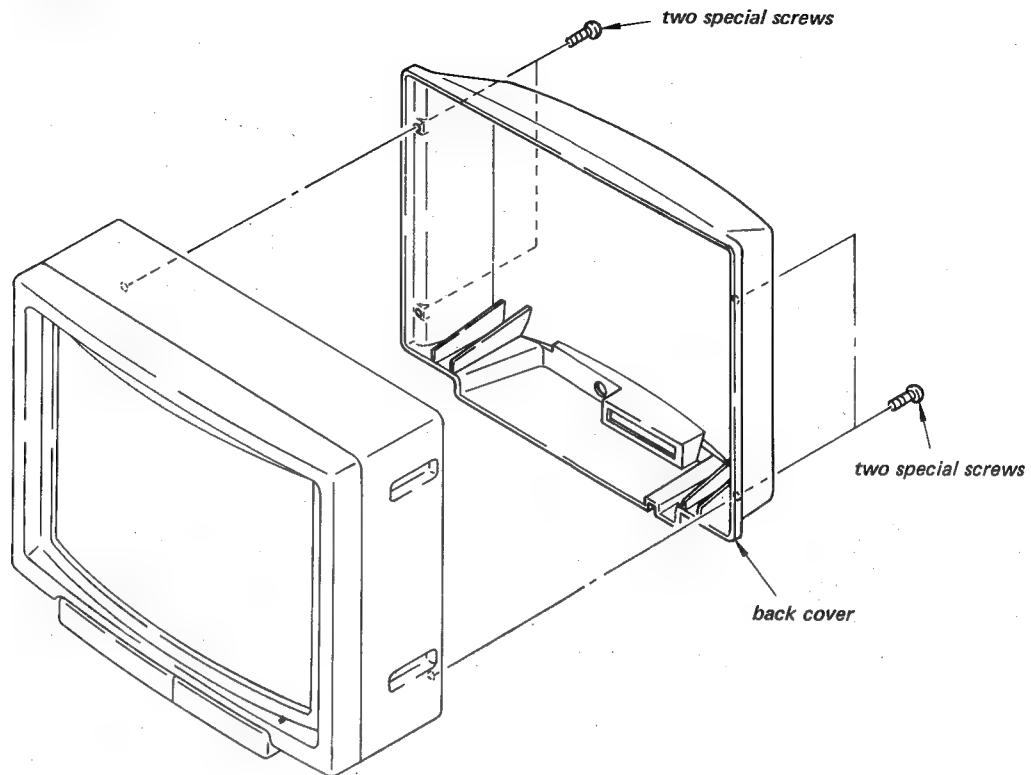
You can connect an external speaker system or an amplifier in the same way as the one for KV-2720EC. If you connect an external speaker system, the attached speaker system will be disconnected.

POWER CONNECTION

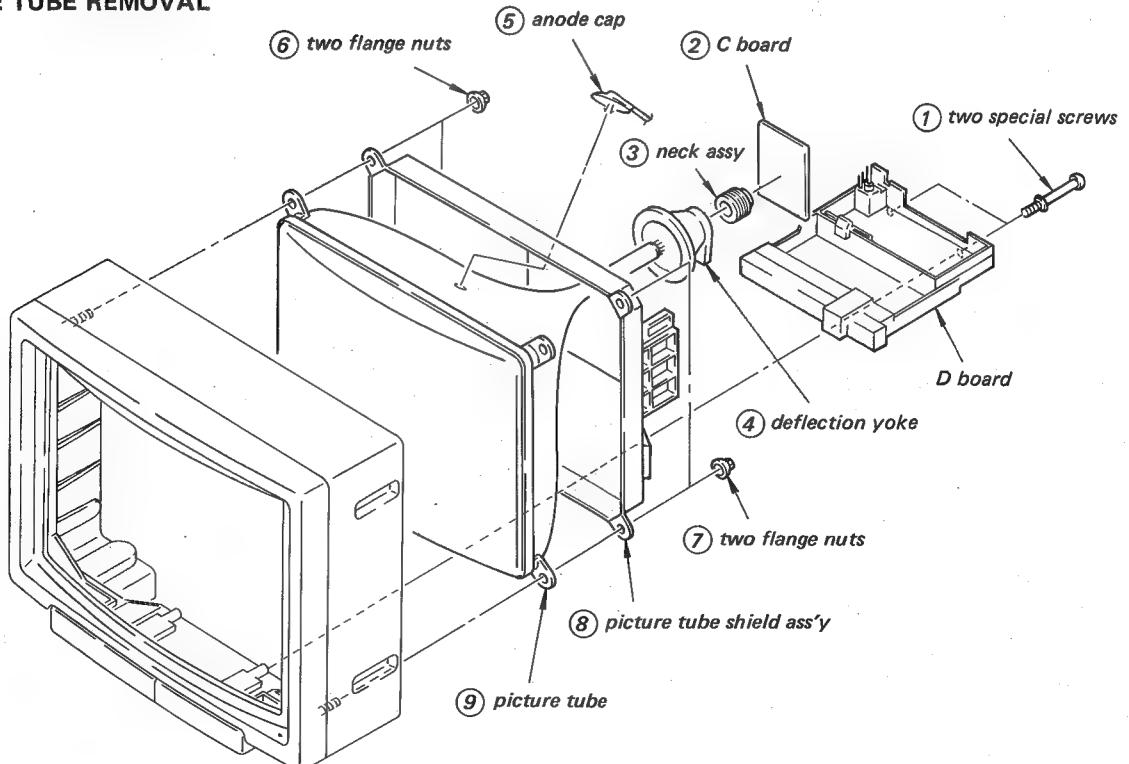
This TV operates only on 220–240 V ac. Plug the ac power cord into a 220–240 V ac wall outlet.

SECTION 2 DISASSEMBLY

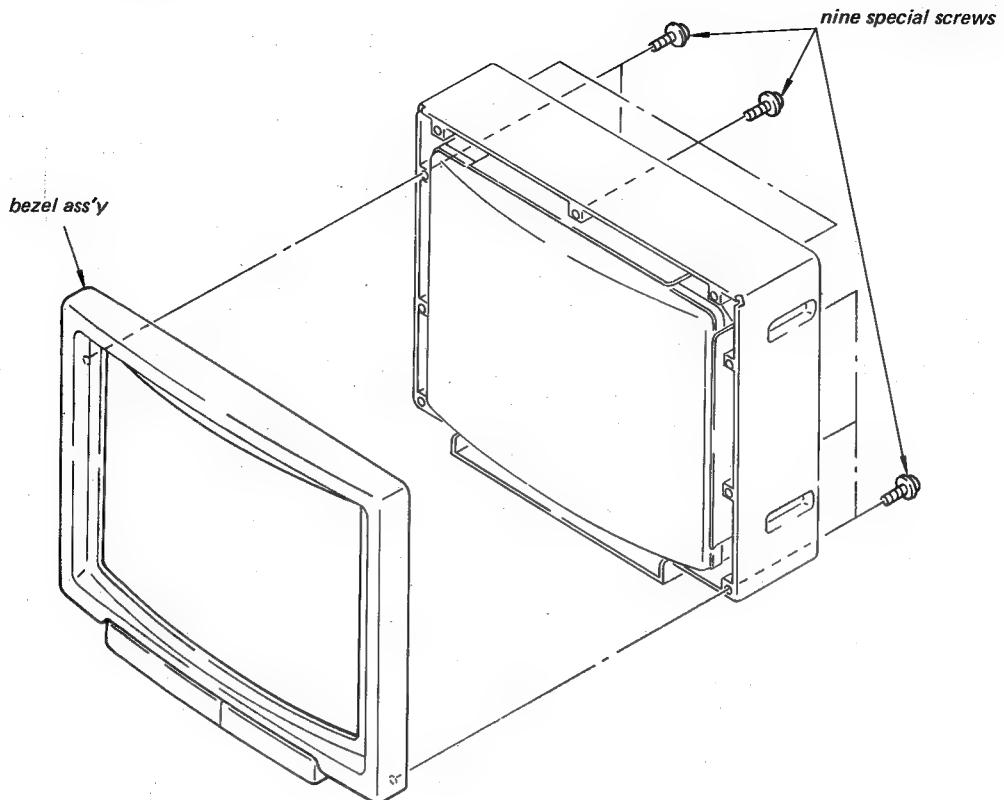
2-1. BACK COVER REMOVAL



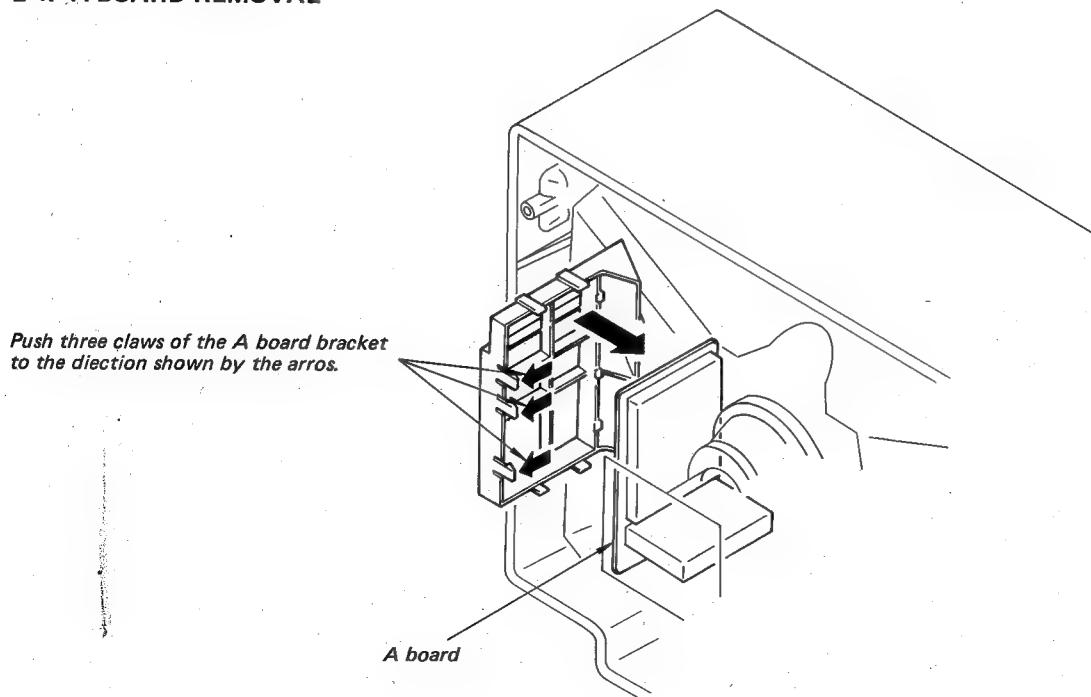
2-2. PICTURE TUBE REMOVAL



2-3. BEZEL ASS'Y REMOVAL

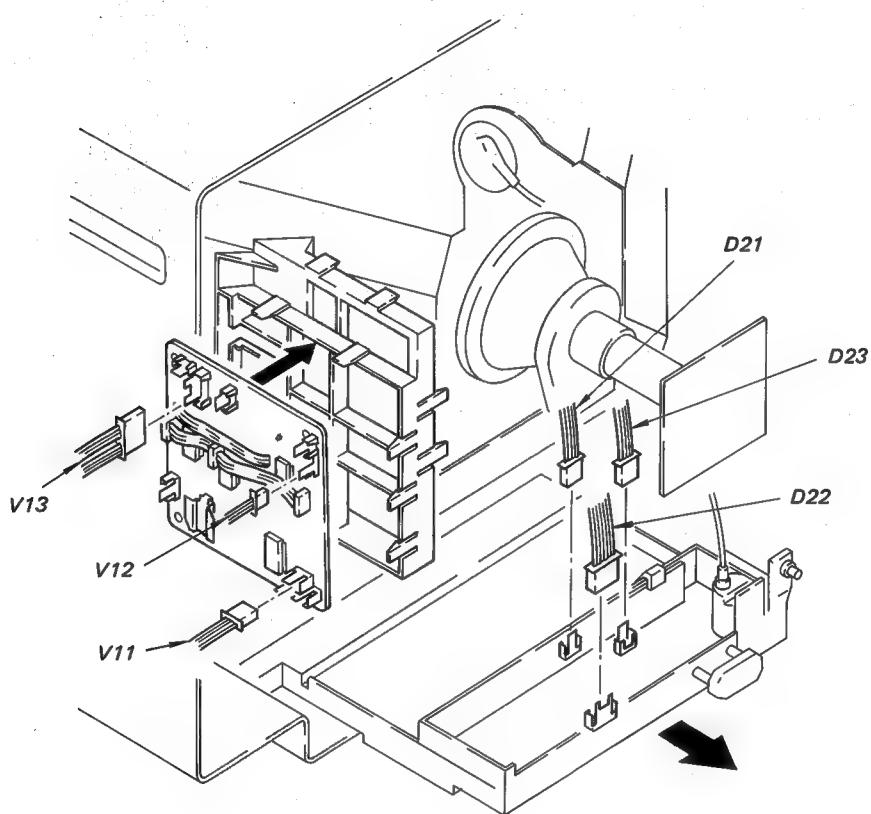


2-4. A BOARD REMOVAL

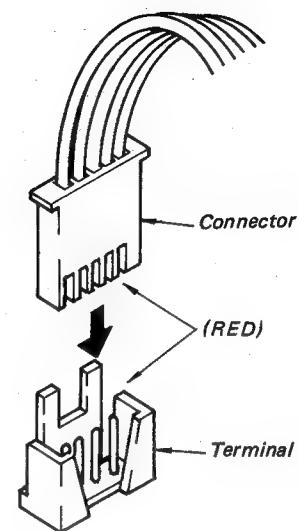
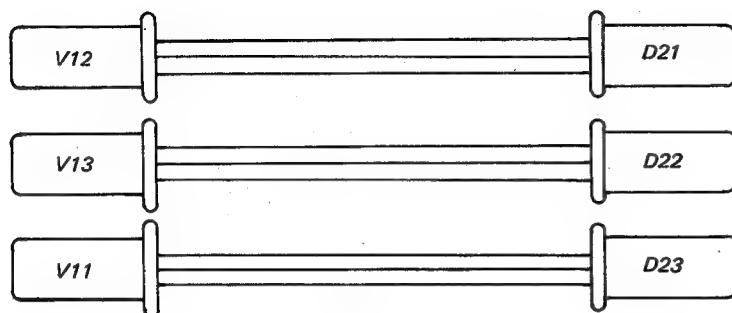


2-5. OPK-203 BOARD ATTACHING

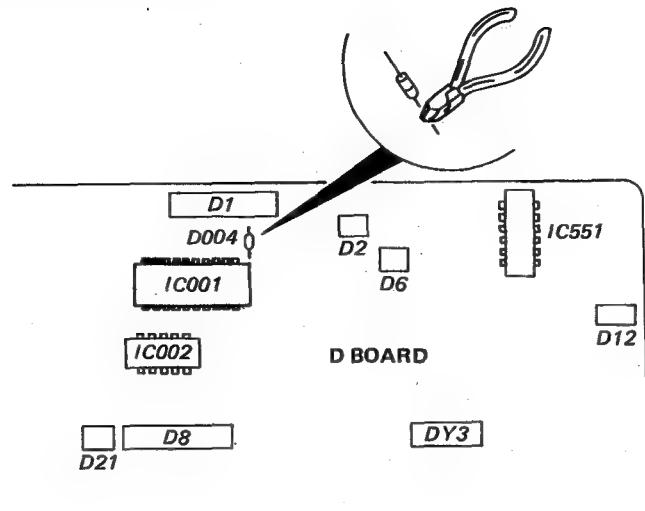
- Before installing the OPK-203 unplug the set from the wall outlet.
 - After the installation is completed, check that the TV operates properly.
 - Cut out the JW81 of the OPK-203.
1. Remove the back cover.
 2. Attach the OPK-203 to the A board bracket and pull out the main chassis ass'y.



3. Connector to the same numberterminal as the connector.
Connected terminals are coloured red.

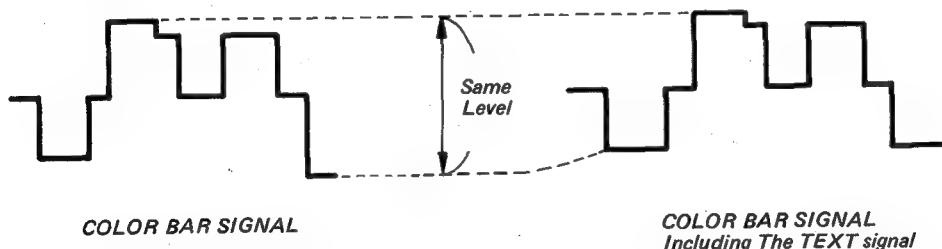


4. Cut out the D004 of the D board.



5. ADJUSTMENT

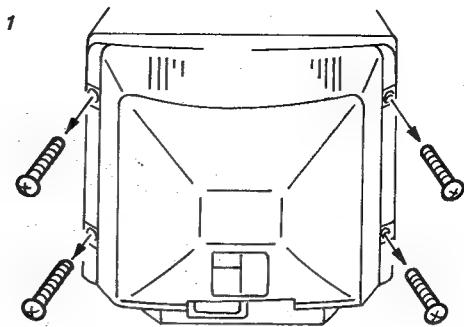
- (1) Set the (picture) control of the minimum and (brightness) control of the mechanical center.
- (2) Receive the COLOR BAR signal.
- (3) Connect the Oscilloscope to the Red input of C board.
- (4) Receive the COLOR BAR signal including the TEXT signal.
- (5) Press the TEXT button on the remote commander.
- (6) Adjust RV-3 for a same level of Red input as shown below.



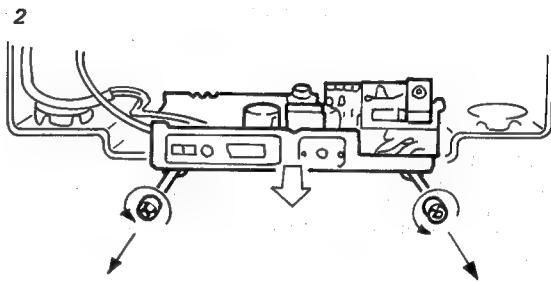
6. Attach the rear panel.

2-6. BEFORE INSTALLING THE OPK-202 UNPLUG THE SET FROM THE WALL OUTLET

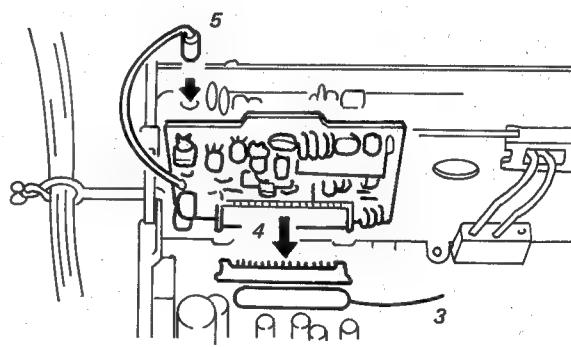
1. Unscrew and remove the rear panel.



2. Unfasten the screws and pull out the main D-board. When cords are clamped, unfasten the plastic retainers. So that the main D-board can be withdrawn easily.



3. Cut off the five soldered connections marked SCM; JW208, 209, 210, 211, 213 on the D-board.



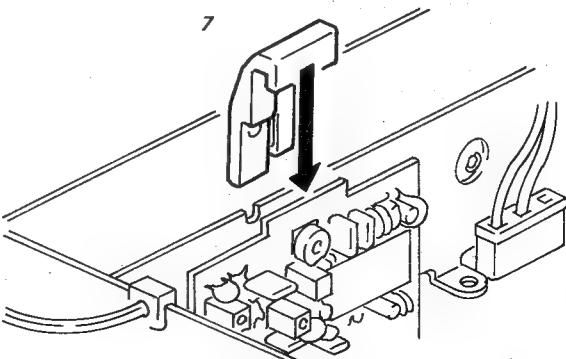
4. Insert the adaptor into the D-20 board as shown.

5. Insert the connector to the D-24 on the board.

6. Connect the power plug and check that the SECAM program is displayed in color.

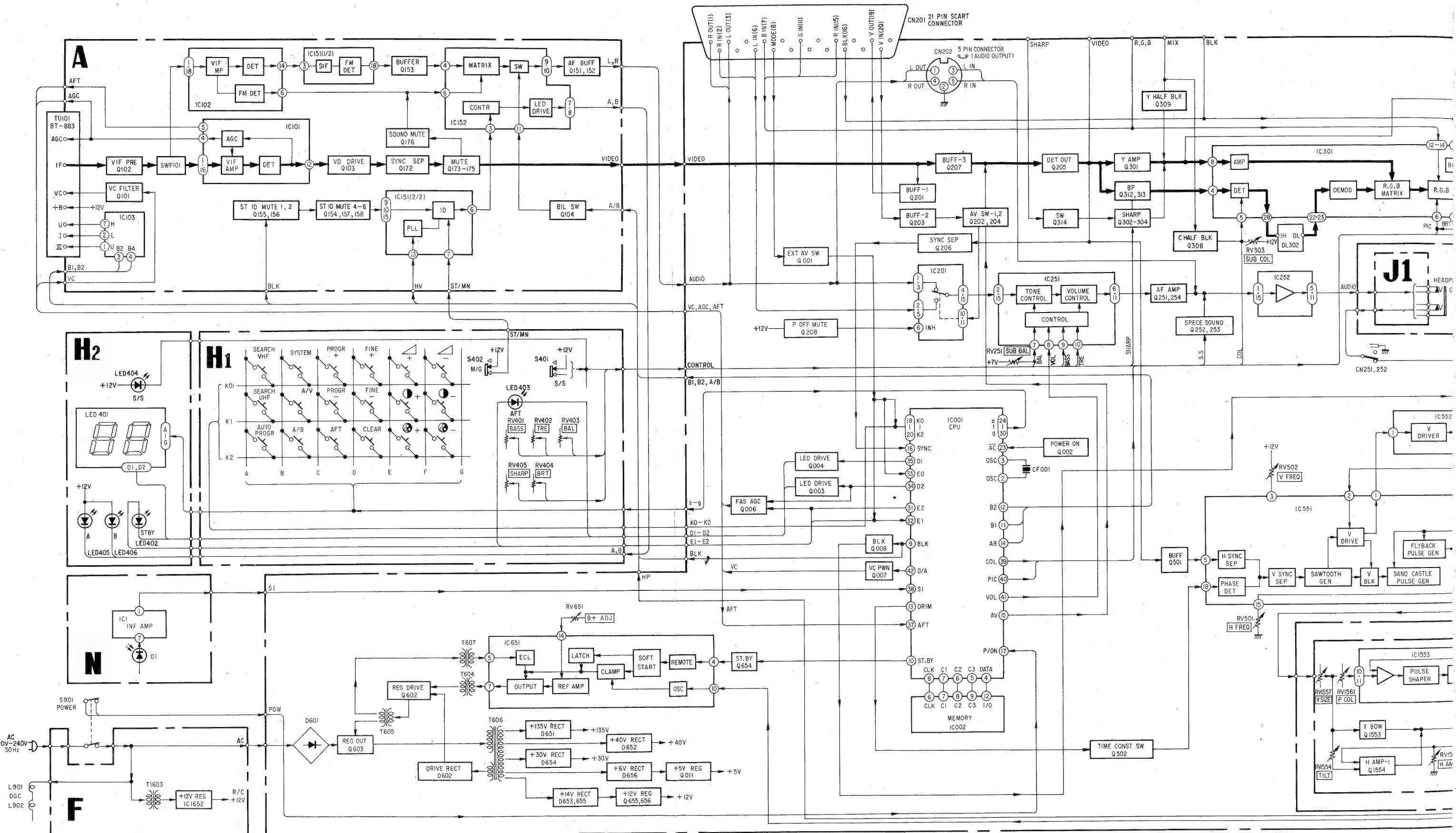
7. Secure the adaptor with the supplied adaptor holder.

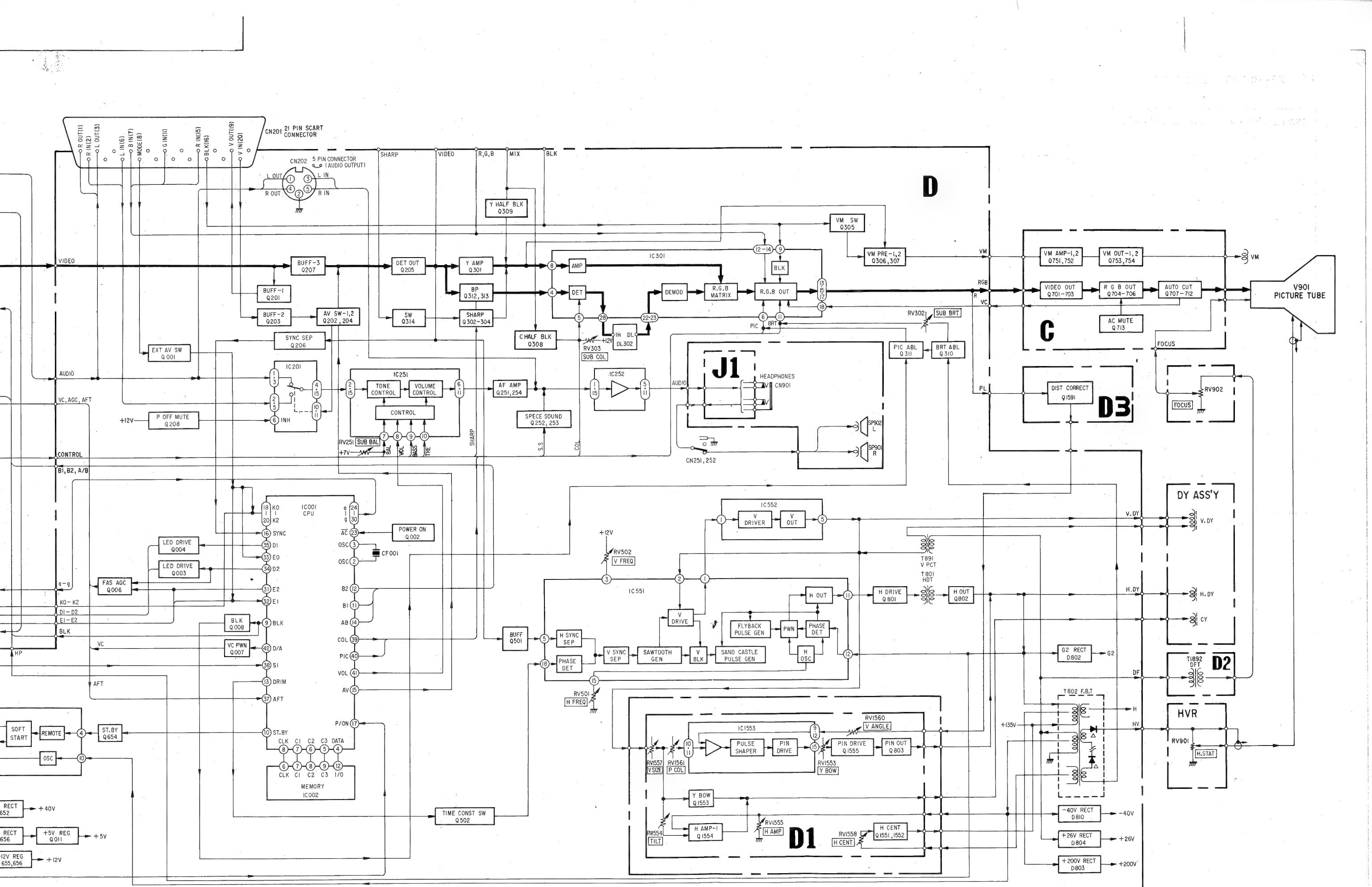
8. Disconnect the plug again and reinstall the main D-board and cords as they were and tighten the screws on the board and rear panel.



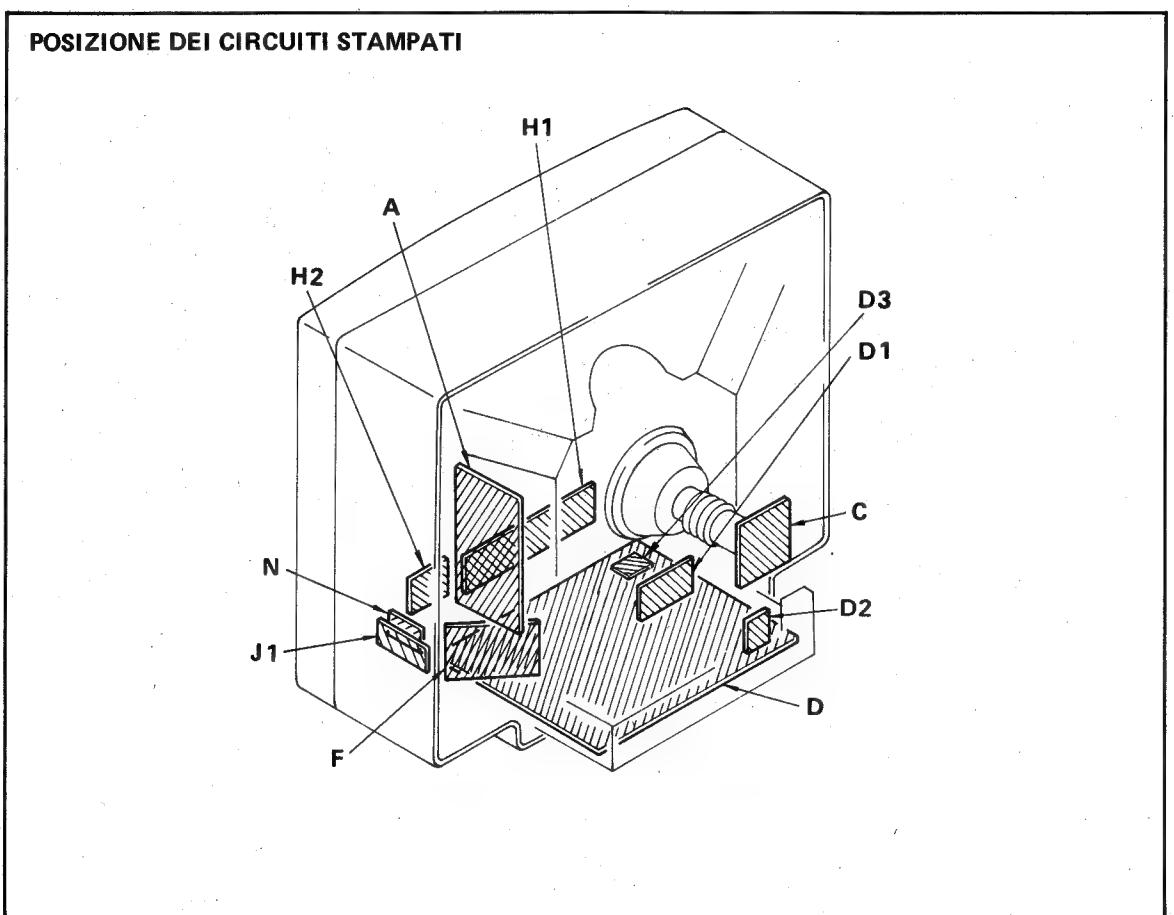
SECTION 3 DIAGRAMS

3-1. BLOCK DIAGRAM





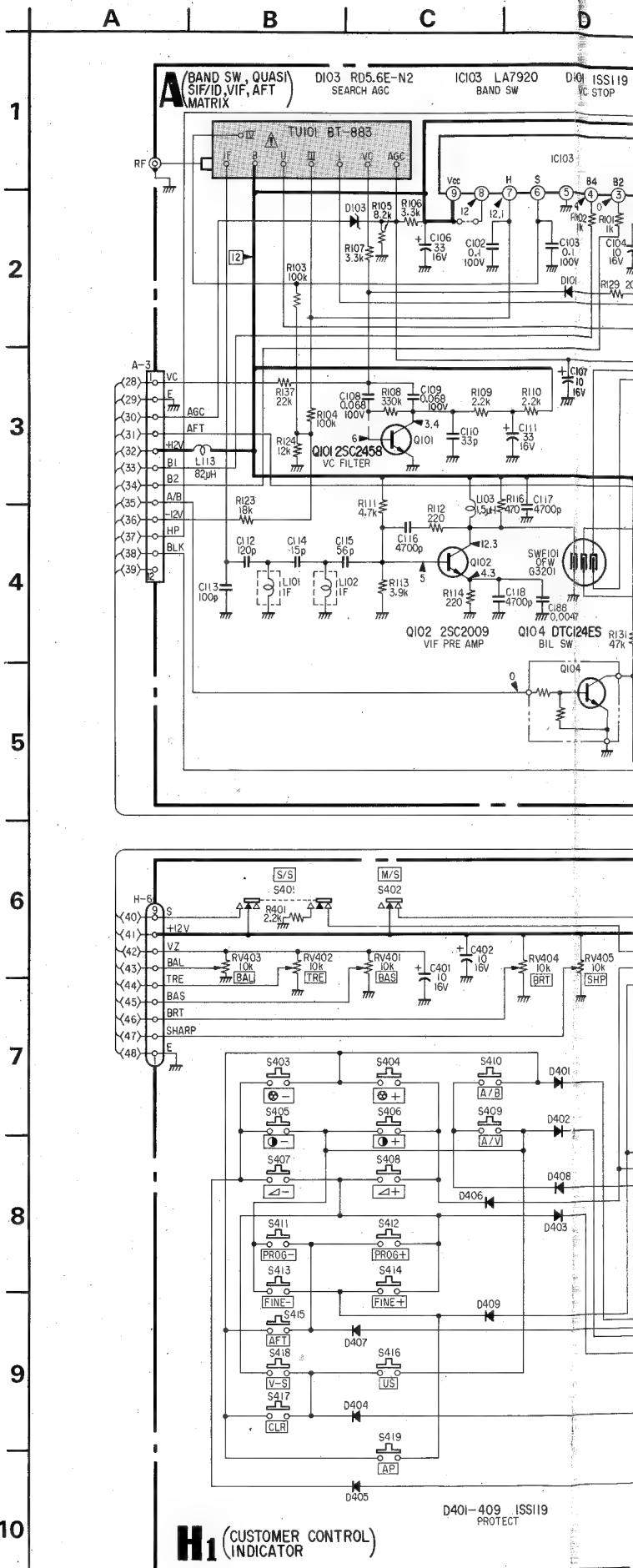
3-2. CIRCUIT BOARDS LOCATION



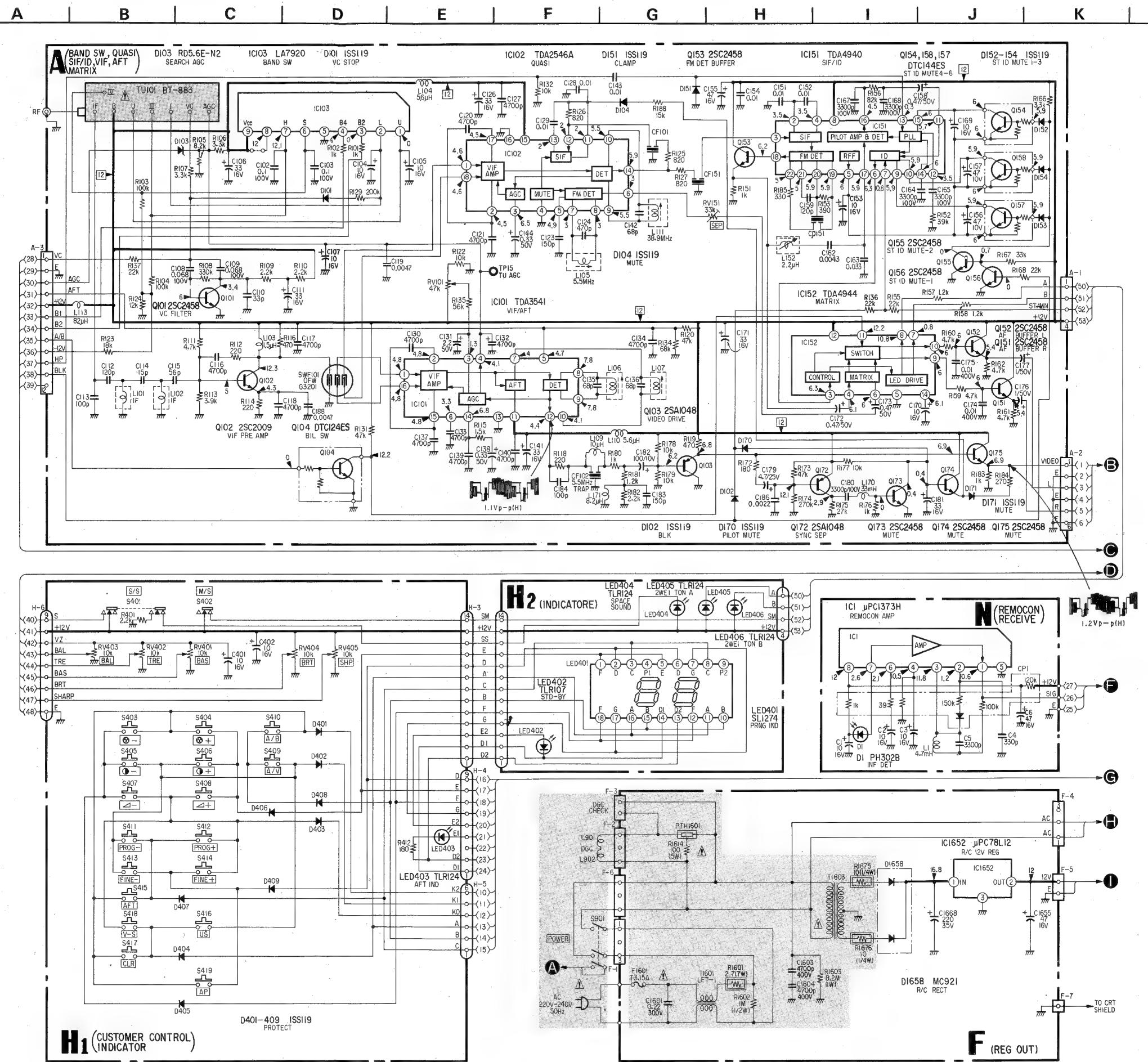
3-3. SCHEMATIC DIAGRAM

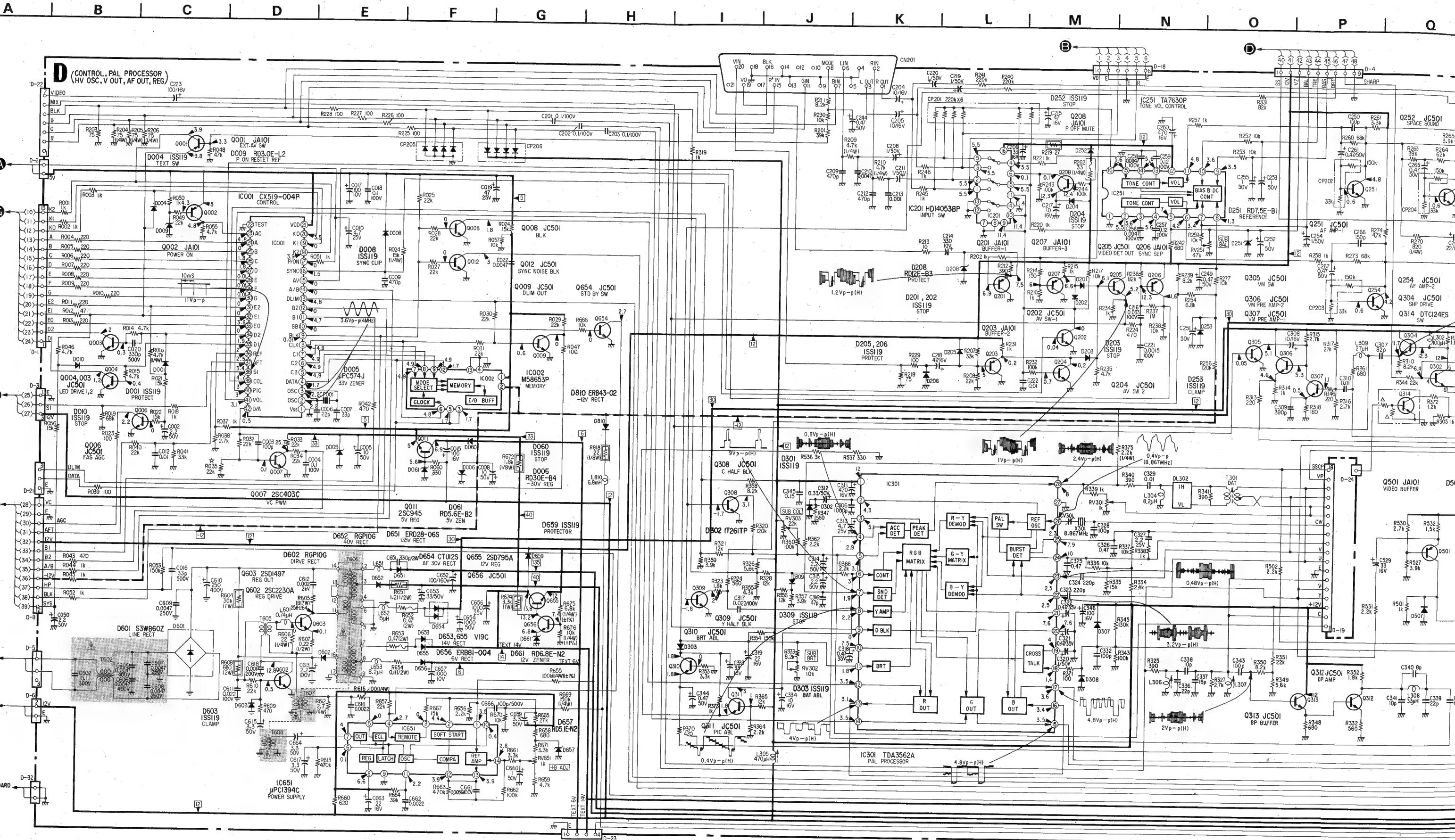
Note:

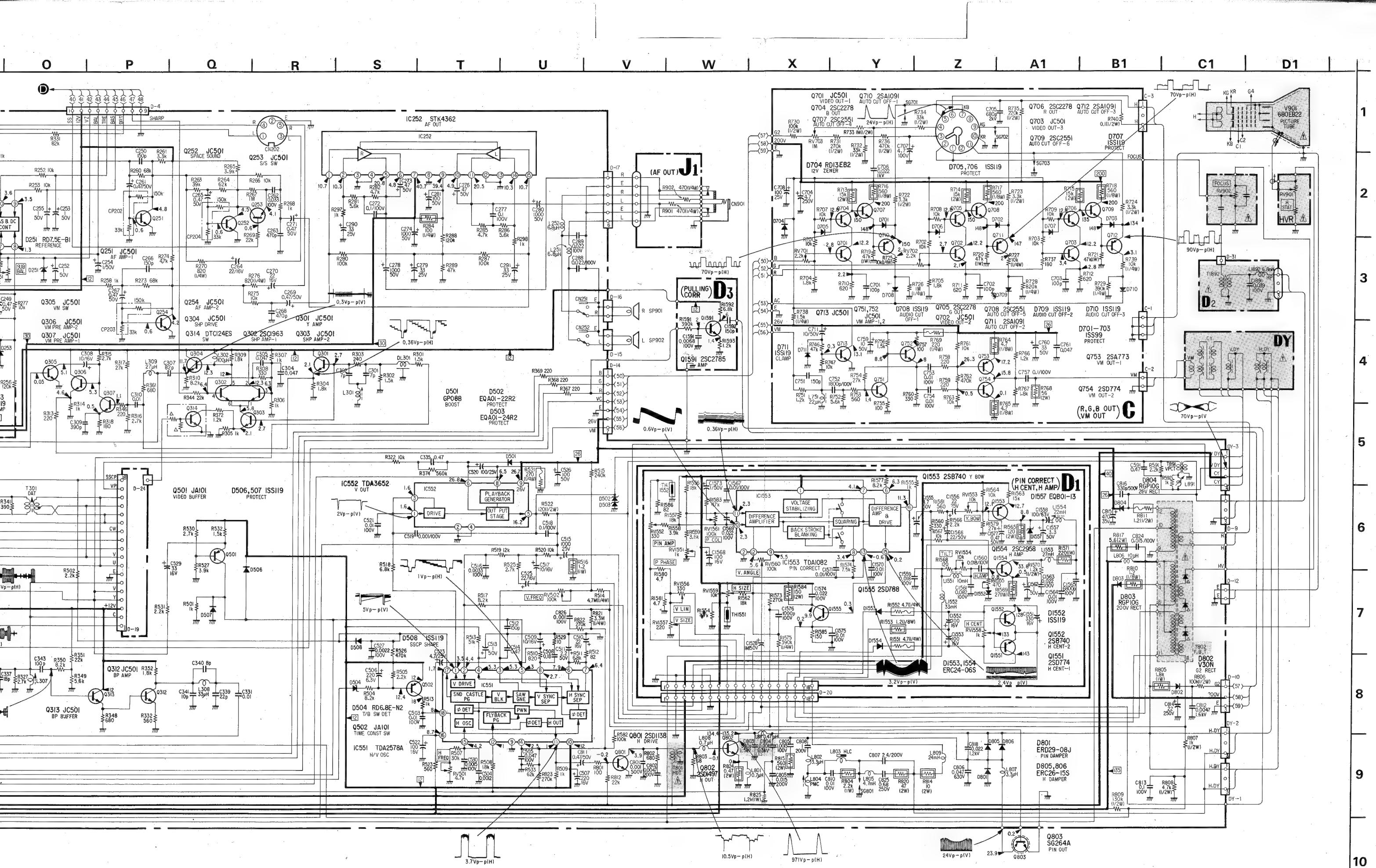
- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytics
- C board and D board resistors are in ohms, $\frac{1}{4}$ W unless otherwise noted, and other boards are in ohms, $\frac{1}{16}$ W unless otherwise noted. $\text{k} : 1000 \Omega$; $\text{M} : 1000 \text{ k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- --- : nonflammable resistor.
- --- : fusible resistor.
- \triangle : internal component.
- \square : panel designation.
- \square : adjustment for repair.
- All voltage are in V.
- --- : B+ bus.
- --- : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a $10 \text{ M}\Omega$ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltages on A and H₁ boards are taken under conditions below.
 - The channel 2 is selected.
 - VOLUME control is set to no sound position.
 - PICTURE control is set to the first stage.
 - (The first stage is the condition when the POWER switch sets to ON.)
- Waveform on A board is taken with controls set to the first stage.
- Voltage variations may be noted due to normal production tolerances.



SCHEMATIC DIAGRAM







3-4. PRINTED WIRING BOARDS

—Conductor side—

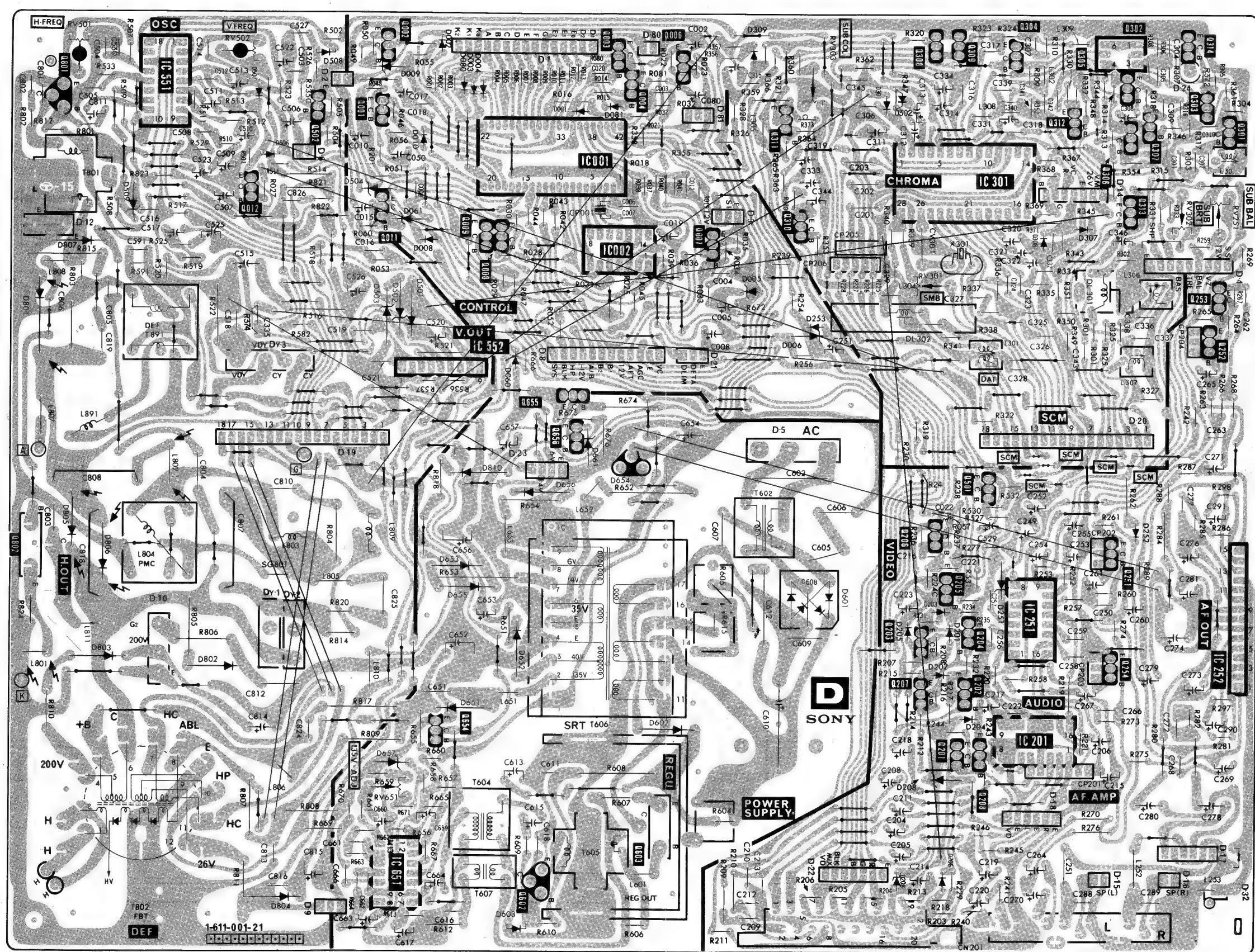
[CONTROL, PAL PROCESSOR
HV OSC, V OUT, AF OUT, REG]

D

D

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O

—D Board—

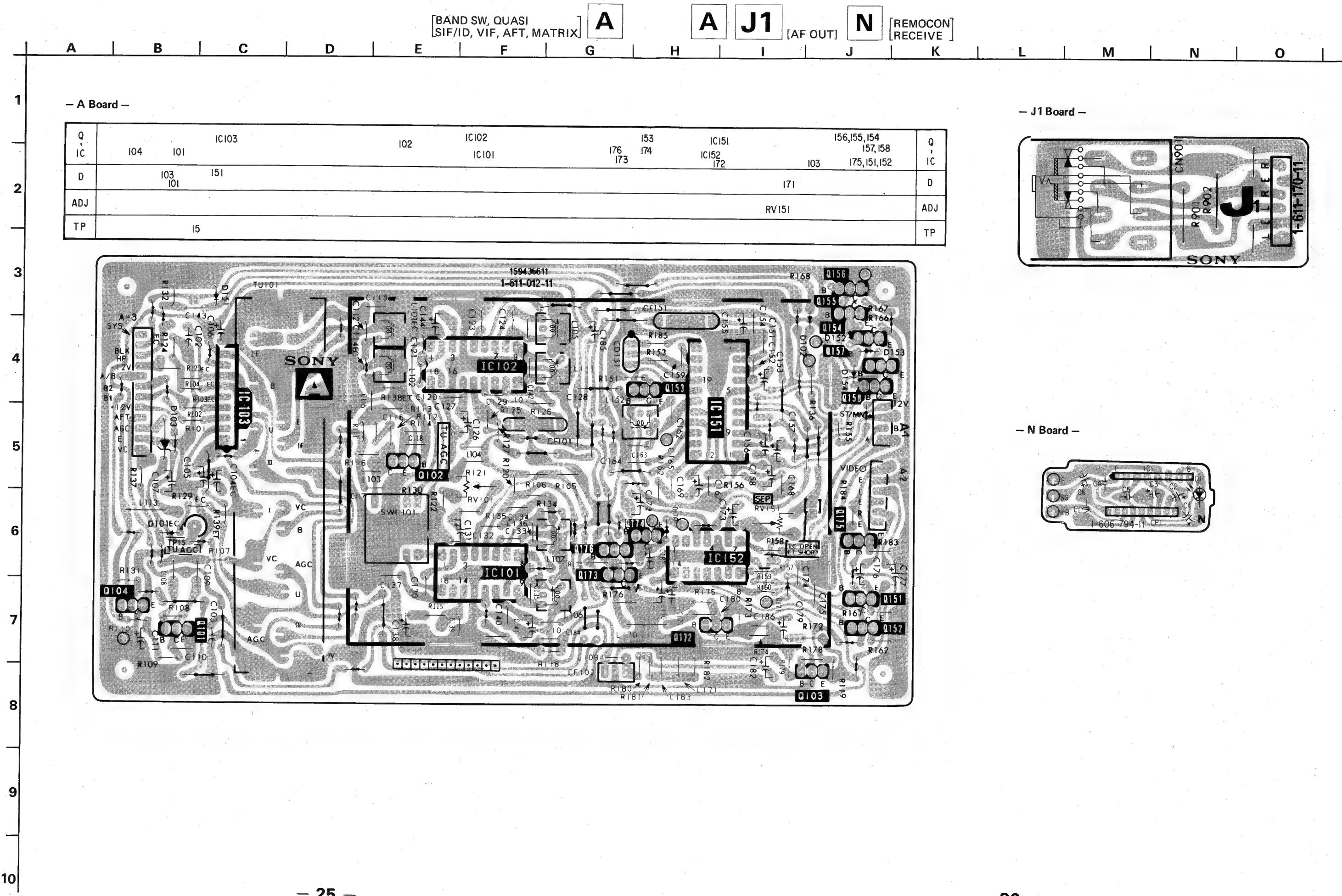


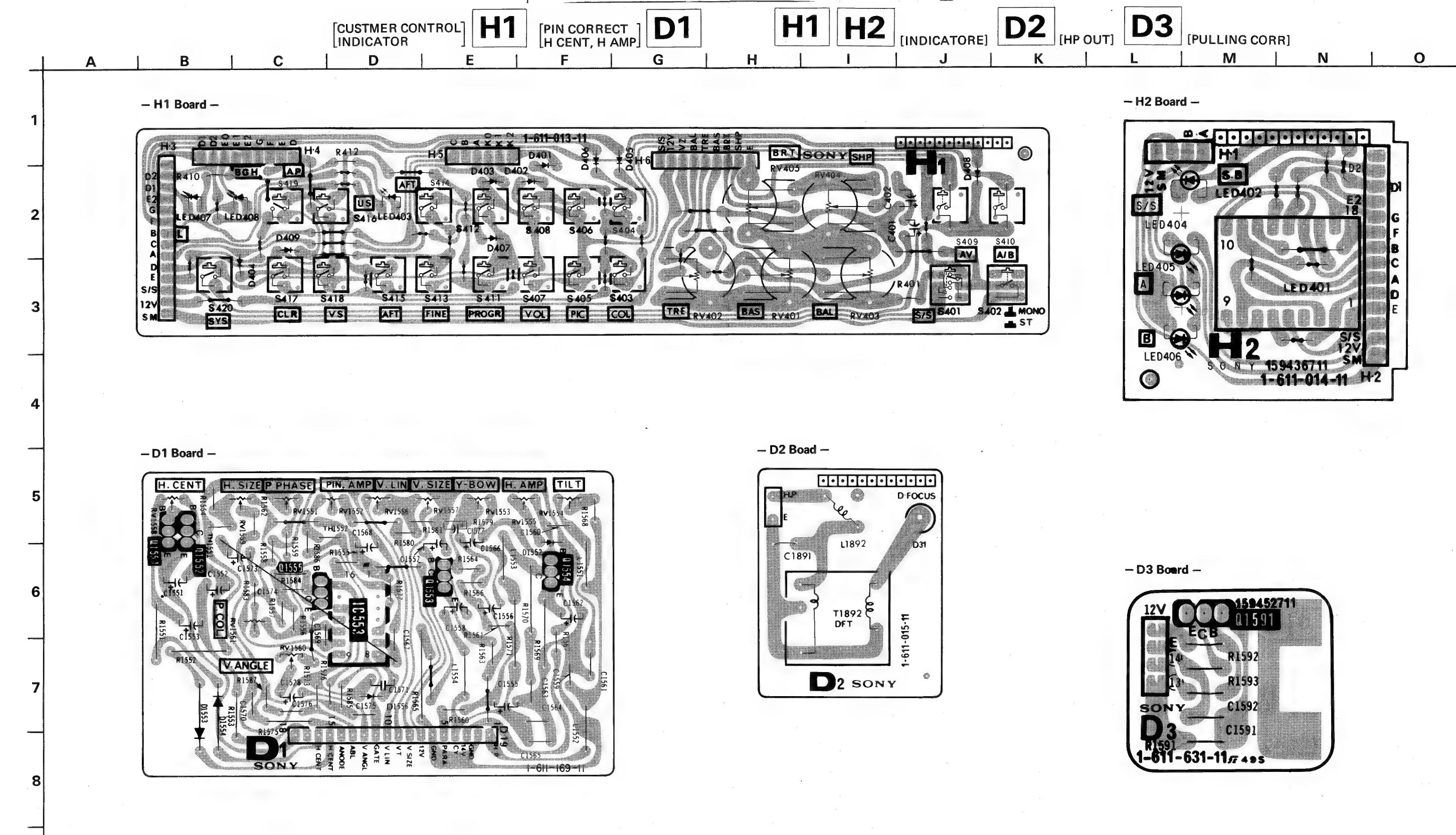
Q, IC	D	ADJ
308,309,314	RV501	
002,003,304	RV502	
006,302		508,002
009,309		009,309
IC551,004,305		507,080,302
801		003,004
502,001,303		081,301
311,312		001
306,307,301		010
IC001		506
IC301		012
012		504
011,313		011,061
310		RV251
009,008,007		307
IC002		RV302
RV301		
253		005
801		801
503,502,501		503,502,501
252		253,006
IC552		060
655		
656		661
501		654
810		810
656		656
206		206,252
802		251
205		806,653
601		205
203		601,203
204		205,201
652		652
203		
254		803,802,202
207,202		207,202
654		651,204
IC201,201,208		602
208		657
RV651		208
603		
IC651,602		208,206
804		
603		603

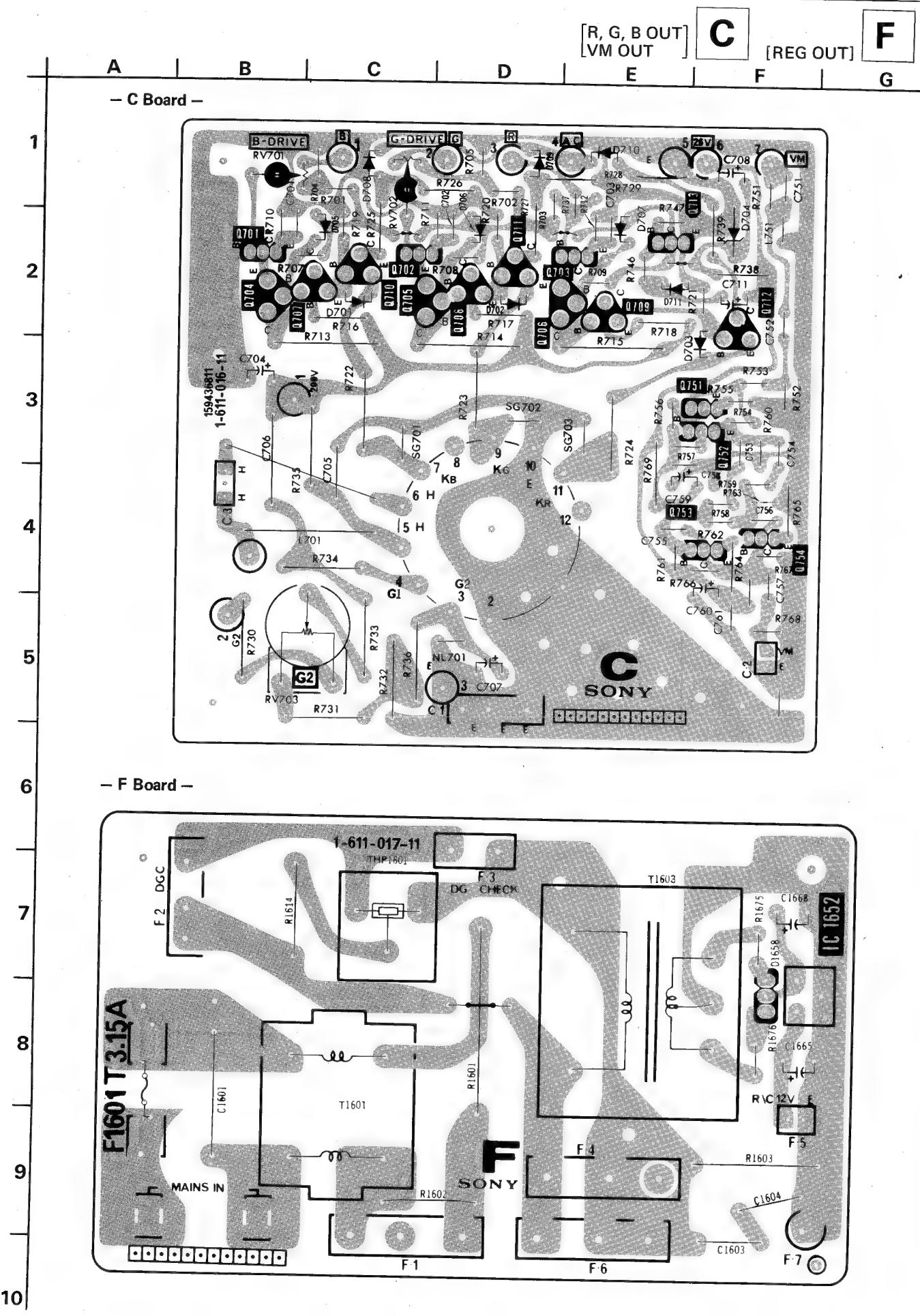
A

—A Board—

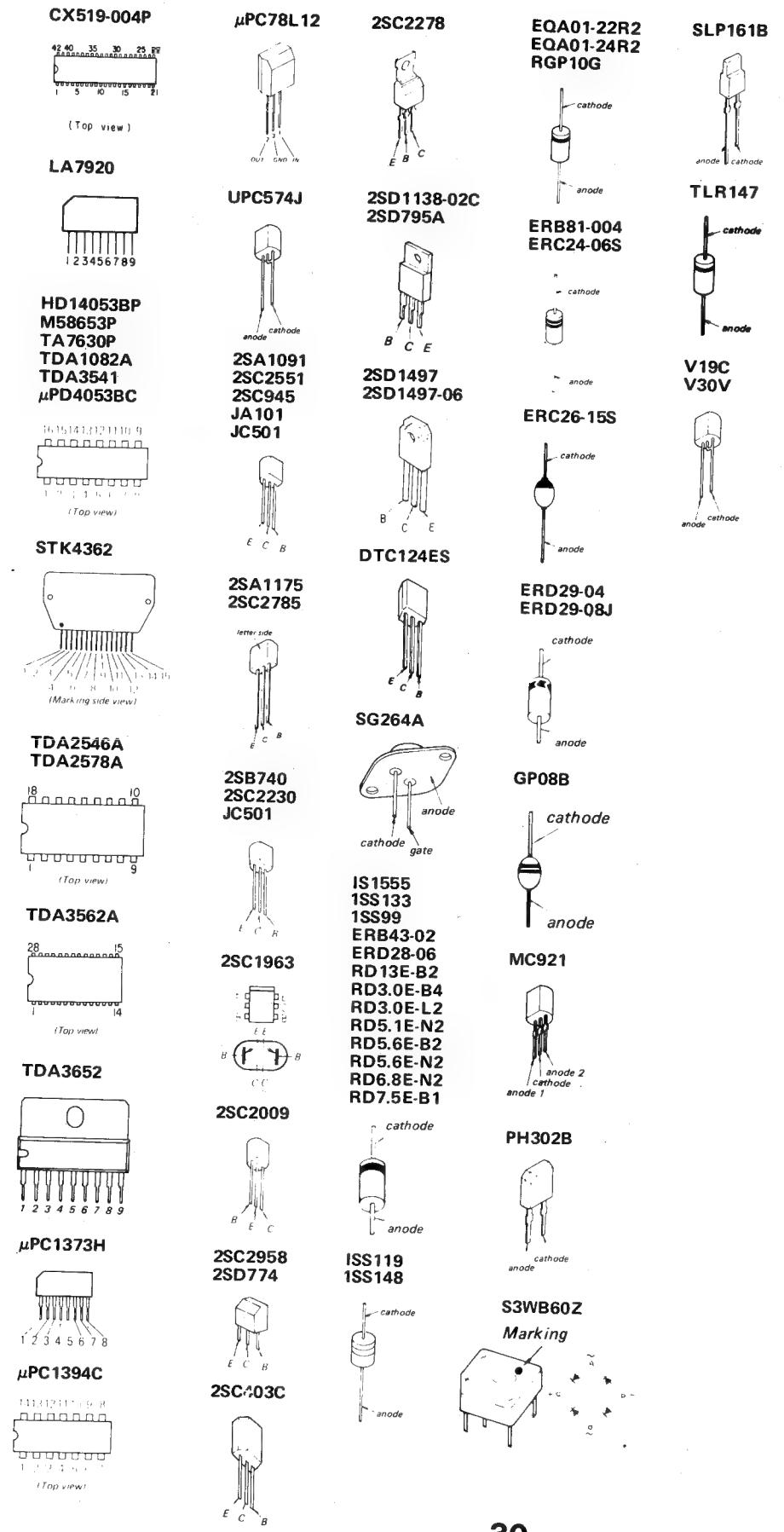
Q, IC	D	ADJ
Q, IC	D	ADJ
D	ADJ	TP







3-5. SEMICONDUCTORS



SECTION 4

EXPLODED VIEWS

3-6. VHF/UHF SCHEMATIC DIAGRAM

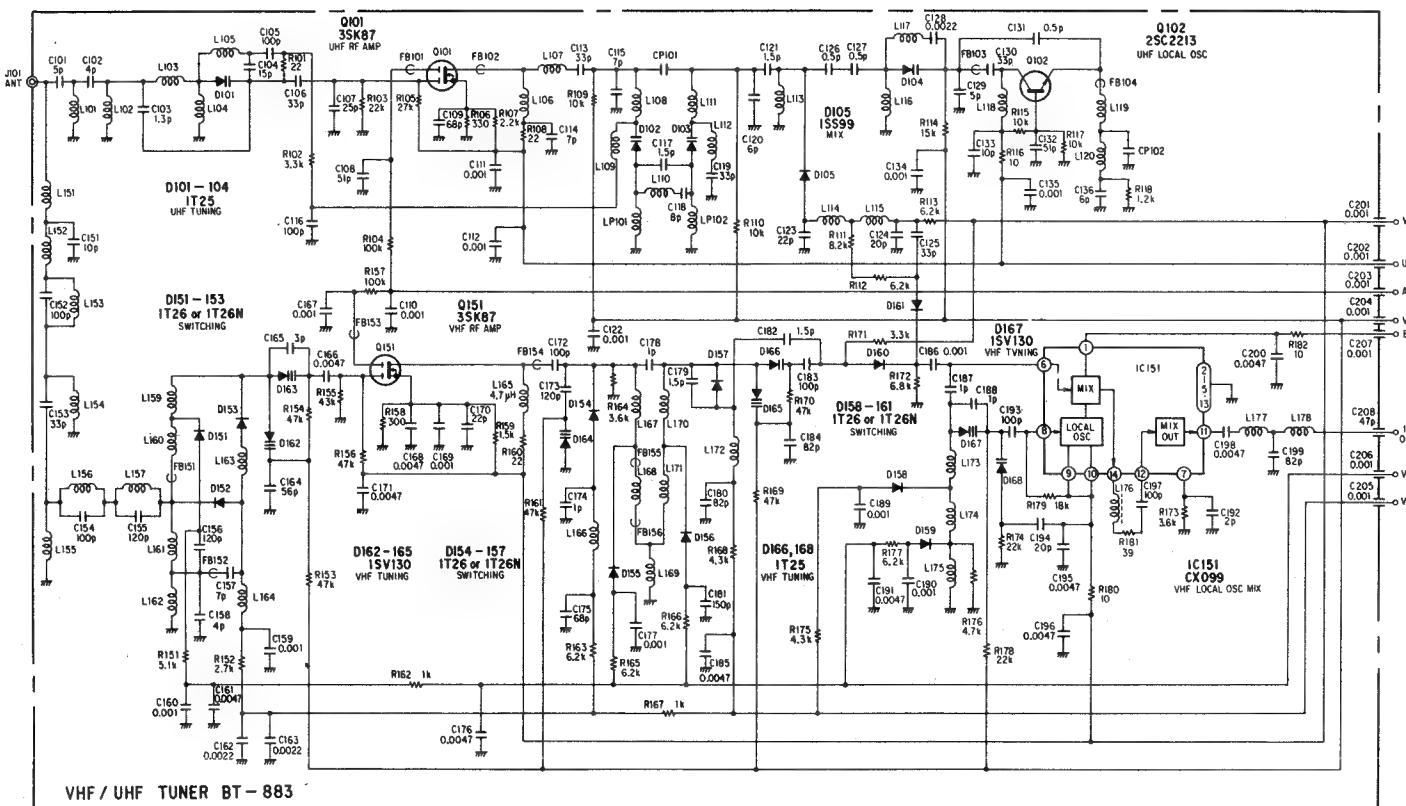
-BT-883-

NOTE

- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - The construction parts of an assembled part are indicated with a collation number in the remark column.

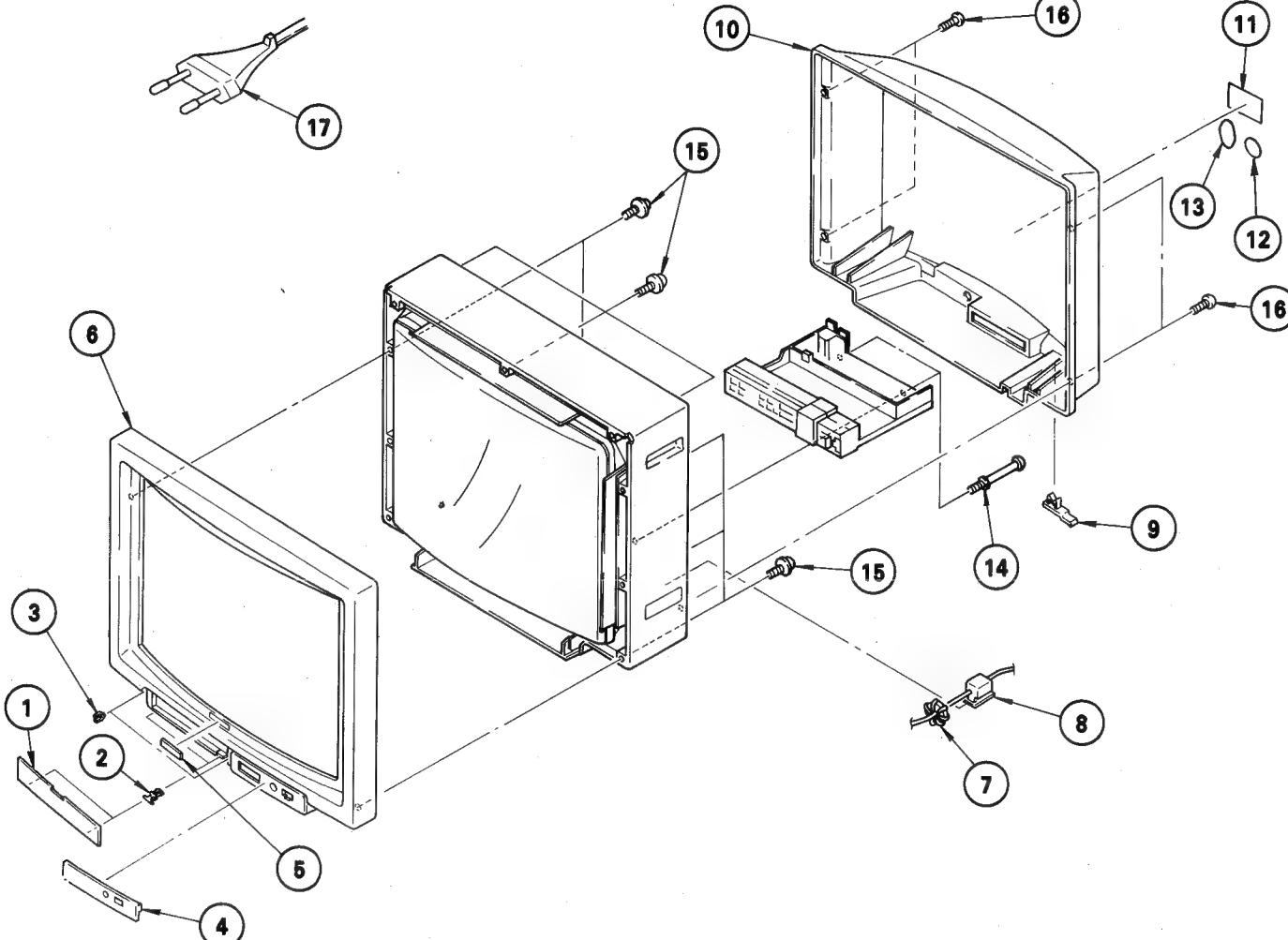
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.



Note: Tuner reference numbers are not included in the Electrical Parts List.

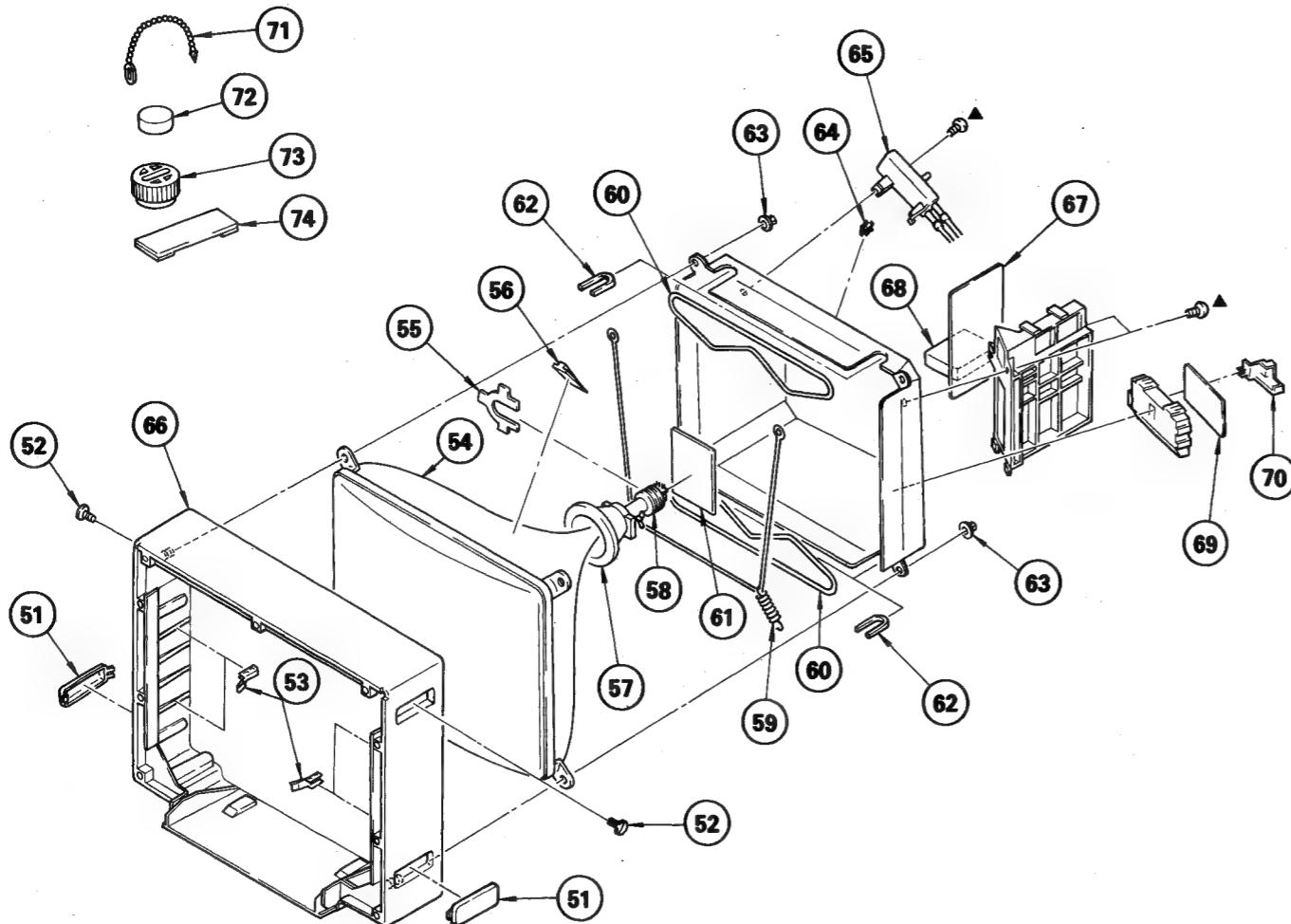
4-1 BEZEL



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	X-4361-925-0	DOOR ASSY		10	4-361-927-00	COVER, BACK	
2	4-361-905-00	SHAFT, DOOR		11	4-369-704-00	LABEL, MODEL NUMBER	
3	4-342-511-00	RETAINER, DOOR		12	4-310-380-00	LABEL, DEMKO	
4	4-361-911-00	WINDOW, ORNAMENTAL, BEZEL		13	3-703-269-00	LABEL, SEV	
5	3-701-912-00	EMBLEM, SONY, (LARGE)		14	4-363-671-00	SCREW (DIA.4), SPECIAL	
6	X-4361-926-0	BEZEL ASSY	3,5	15	4-309-749-00	SCREW, TAPPING, +PW4X20	
7	1-543-179-00	CORE, RING		16	4-365-513-00	SCREW (4X16), TAPPING, SPECIAL	
8	A-022-115-00	HOLDER, AC CORD		17	A-1-551-427-11	CORD, POWER	
9	4-329-127-00	CLAMP, CORD					

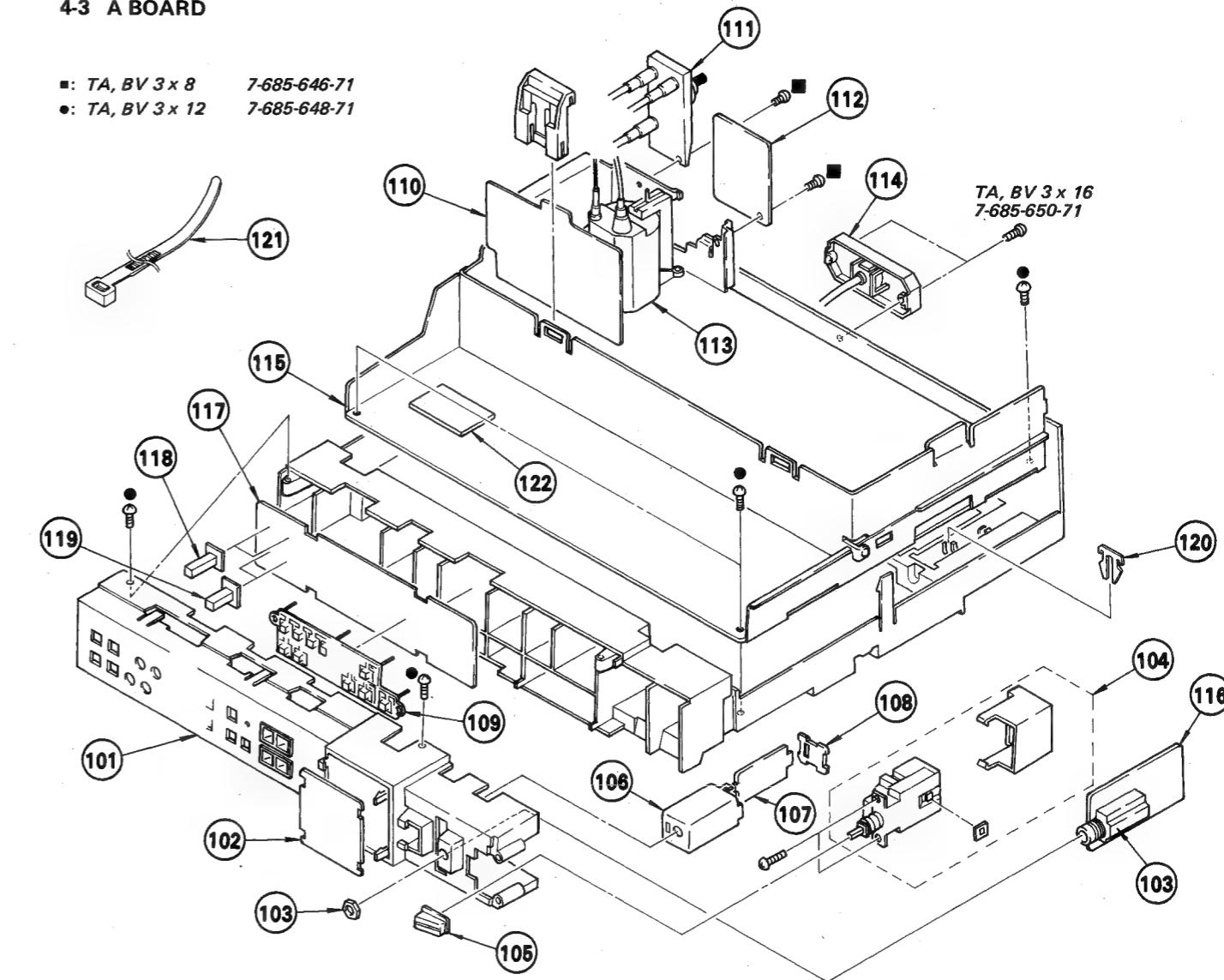
4-2 CABINET

▲: TA, BV 4 x 12 7-685-661-14



4-3 A BOARD

■: TA, BV 3 x 8 7-685-646-71
●: TA, BV 3 x 12 7-685-648-71



No.	Part No.	Description	Remark
51	4-361-907-00	PLATE, ORNAMENTAL, CABINET	
52	4-363-611-00	SCREW, ORNAMENTAL	
53	▲: 4-363-646-00	HOLDER, CORD	
54	▲: 8-738-405-05	CRT 680EB22	
55	1-452-146-00	MAGNET, BMC	
56	3-703-003-00	SPACER, DY	
57	▲: 1-451-226-00	DEFLECTION YOKE (SY105A)	
58	▲: 1-452-315-00	CRT NECK ASSY (NA303)	
59	4-303-774-XX	SPRING	
60	▲: 1-426-041-00	COIL, DEGAUSSING	
61	▲: A-1330-470-A	C BOARD, COMPLETE	
62	▲: 4-330-306-00	BUSHING, CRT INSULATING	

No.	Part No.	Description	Remark
63	4-330-305-00	NUT, SPECIAL	
64	▲: 4-322-922-00	HOLDER, COIL, DEGAUSSER	
65	▲: A-228-544-00	RESISTOR ASSY, HIGH-VOLTAGE	
66	X-4361-927-2	CABINET ASSY	
67	▲: A-1295-788-A	A BOARD, SUB, COMPLETE	
68	▲: A-1463-421-21	TUNER, ET (BT-883)	
69	▲: 1-611-017-00	F BOARD	
70	▲: 4-362-247-00	COVER, AC TERMINAL	
71	4-308-870-00	CLIP, LEAD WIRE	
72	1-452-032-00	MAGNET, DISK; 10MM Ø	
73	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
74	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	

No.	Part No.	Description	Remark
101	4-363-677-00	PANEL, CONTROL	
102	▲: 1-611-014-00	H2 BOARD	
103	▲: 1-507-657-00	JACK	
104	▲: 1-553-225-00	SWITCH, PUSH	
105	4-364-805-00	BUTTON, POWER	
106	▲: 4-342-117-00	CASE, SHIELD (MAIN), R	
107	▲: 1-606-794-00	N BOARD	
108	▲: 4-342-118-00	LID, SHIELD CASE, R	
109	4-363-675-00	BUTTON, MULTI	
110	▲: A-1340-571-A	D1 BOARD, COMPLETE	
111	▲: A-215-066-21	RES ASSY, HIGH-VOLTAGE	

No.	Part No.	Description	Remark
112	▲: 1-611-015-00	D2 BOARD	
113	▲: 1-439-332-00	TRANSFORMER ASSY, FLYBACK	
114	▲: A-1-536-817-00	TERMINAL BOARD ASSY, ANTENNA	
115	▲: A-1345-439-A	D BOARD, SUB, COMPLETE	
116	▲: 1-611-170-00	J1 BOARD	
117	▲: 1-611-013-00	H1 BOARD	
118	4-361-939-00	PUSH BUTTON (B)	
119	4-361-938-00	PUSH BUTTON (A)	
120	▲: 4-369-712-01	STOPPER	
121	3-701-748-00	CLAMP	
122	▲: 1-611-631-11	D3 BOARD	

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

SECTION 5 ELECTRICAL PARTS LIST

F **A**

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS

- MF : μF , PF : $\mu\mu\text{F}$

RESISTORS

- All resistors are in ohms
- F : nonflammable

COILS

- MMH : mH, UH : μH

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	●:1-611-017-00	F BOARD	*****				
		CAPACITOR				CONNECTOR	
	C1601A1-130-238-00	MYLAR	0.22MF	20%	300V	A1 ●:1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
	C1603A1-161-738-00	CERAMIC	0.0047MF	20%	400V	A2 ●:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
	C1604A1-161-738-00	CERAMIC	0.0047MF	20%	400V	A3 ●:1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)
	C1655 1-123-332-00	ELECT	47MF	20%	16V		
	C1668 1-123-346-00	ELECT	220MF	20%	35V		
		DIODE					
D1658	8-719-000-06	DIODE MC921				C102 1-108-389-00	CAPACITOR
		CONNECTOR				C103 1-108-389-00	MYLAR
F1	●:1-506-348-XX	3P PLUG (L)				C104 1-123-356-00	ELECT
F2	●:1-508-765-00	3P PLUG (M)				C105 1-123-356-00	10MF
F3	●:1-508-786-00	2P PLUG (M)				C106 1-123-318-00	10MF
F4	●:1-506-348-XX	3P PLUG (L)				C107 1-123-356-00	ELECT
F5	●:1-506-290-00	PLUG, CONNECTOR (2.5MM PITCH)				C108 1-108-387-00	10MF
F6	●:1-506-348-XX	3P PLUG (L)				C109 1-108-387-00	MYLAR
F7	●:1-508-784-00	1P PLUG				C110 1-102-963-00	CERAMIC
		FUSE				C111 1-123-318-00	33PF
	F1601A1-532-237-00	FUSE, TIME-LAG 3.15A				C112 1-102-530-00	33MF
	1-533-087-00	HOLDER, FUSE, F1601				C113 1-102-529-00	CERAMIC
		IC				C114 1-102-851-00	120PF
IC1652	8-759-178-12	IC UPC78L12				C115 1-102-523-00	100PF
		THERMISTOR				C116 1-102-125-00	15PF
	ΔPTH1601.1-806-387-00	THERMISTOR (POSITIVE)				C117 1-102-125-00	0.0047MF
		RESISTOR				C118 1-102-125-00	10%
R1601A1-217-328-00	WIREWOUND	2.7	10%	7W	F	C119 1-102-125-00	50V
R1602A1-202-719-00	SOLID	1M	10%	1/2W		C120 1-102-125-00	10%
R1603A1-247-289-00	CARBON	8.2M	5%	1W		C121 1-102-125-00	50V
R1614A1-205-653-00	CEMENTED	100	5%	5W		C122 1-102-108-00	10%
R1675A1-247-083-00	SOLID	10		1/4W	F	C123 1-102-125-00	50V
R1676A1-247-083-00	SOLID	10		1/4W	F	C124 1-130-014-00	0.0047MF
		TRANSFORMER				C126 1-123-318-00	470PF
T1601A1-421-352-00	TRANSFORMER, FERRITE					C127 1-102-125-00	20%
T1603A1-447-703-00	TRANSFORMER, POWER					C128 1-101-004-00	10%
*****	*****	*****	*****	*****	*****	C129 1-101-004-00	50V
●:A-1295-788-A	A BOARD, SUB, COMPLETE		*****			C130 1-102-125-00	0.0047MF
●:4-363-672-00	CASE (MAIN), SHIELD, VIF					C131 1-123-353-00	10%
●:4-363-673-00	CASE (BOTTOM LID), SHIELD, VIF					C132 1-102-125-00	50V
●:4-363-674-00	CASE (UPPER LID), SHIELD, VIF					C133 1-102-125-00	0.0047MF
						C134 1-102-125-00	10%
						C135 1-102-525-00	50V
						C136 1-102-525-00	5%
						C137 1-102-125-00	0.0047MF
						C138 1-123-286-00	10%
						C139 1-102-125-00	50V
						C140 1-102-125-00	0.0047MF
						C141 1-123-318-00	20%
						C142 1-102-525-00	5%
						C143 1-101-004-00	50V
						C144 1-123-286-00	0.0047MF
						C151 1-101-004-00	20%
						C152 1-101-004-00	50V
						C153 1-123-356-00	0.01MF
						C154 1-101-004-00	20%
						C155 1-123-332-00	50V
						C156 1-123-306-00	0.01MF
							10V

A

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>		<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>	
C157	1-123-306-00	ELECT	47MF	20%	10V			<u>COIL</u>			
C158	1-123-379-00	ELECT	0.47MF	20%	50V	L101	1-404-476-00	COIL, IF			
C159	1-102-816-00	CERAMIC	120PF	5%	50V	L102	1-404-476-00	COIL, IF			
C162	1-108-570-00	MYLAR	0.0043MF	5%	50V	L103	1-408-593-00	MICRO INDUCTOR 1.5UH			
C163	1-130-626-00	FILM	0.033MF	5%	50V	L104	1-408-406-00	MICRO INDUCTOR 5.6UH			
C164	1-108-371-00	MYLAR	0.0033MF	10%	100V	L105	1-404-477-00	COIL, IF 5.5MHz			
C165	1-108-371-00	MYLAR	0.0033MF	10%	100V	L106	1-404-493-00	COIL			
C167	1-108-371-00	MYLAR	0.0033MF	10%	100V	L107	1-404-493-00	COIL			
C168	1-108-371-00	MYLAR	0.0033MF	10%	100V	L109	1-408-409-00	MICRO INDUCTOR 10UH			
C169	1-123-356-00	ELECT	10MF	20%	16V	L110	1-408-406-00	MICRO INDUCTOR 5.6UH			
C170	1-123-356-00	ELECT	10MF	20%	16V	L111	1-404-493-00	COIL 38.9MHz			
C171	1-123-318-00	ELECT	33MF	20%	16V	L113	1-408-226-00	MICRO INDUCTOR 82UH			
C172	1-123-379-00	ELECT	0.47MF	20%	50V	L152	1-404-506-00	COIL, VARIABLE 2.2UH			
C173	1-123-379-00	ELECT	0.47MF	20%	50V	L170	1-408-247-00	MICRO INDUCTOR 33MMH			
C174	1-106-367-00	MYLAR	0.01MF	10%	400V	L171	1-408-408-00	MICRO INDUCTOR 8.2UH			
C175	1-106-367-00	MYLAR	0.01MF	10%	400V			<u>TRANSISTOR</u>			
C176	1-123-380-00	ELECT	1MF	20%	50V	Q101	8-729-245-83	TRANSISTOR 2SC2458			
C177	1-123-380-00	ELECT	1MF	20%	50V	Q102	8-765-300-00	TRANSISTOR 2SC2009			
C179	1-123-328-00	ELECT	4.7MF	20%	25V	Q103	8-729-204-83	TRANSISTOR 2SA1048-GR			
C180	1-108-371-00	MYLAR	0.0033MF	10%	100V	Q104	8-729-900-36	TRANSISTOR DTC124ES			
C181	1-123-318-00	ELECT	33MF	20%	16V	Q151	8-729-245-83	TRANSISTOR 2SC2458			
C182	1-123-307-00	ELECT	100MF	20%	10V	Q152	8-729-245-83	TRANSISTOR 2SC2458			
C183	1-102-108-00	CERAMIC	150PF	10%	50V	Q153	8-729-245-83	TRANSISTOR 2SC2458			
C184	1-102-973-00	CERAMIC	100PF	5%	50V	Q154	8-729-900-89	TRANSISTOR DTC144ES			
C186	1-102-121-00	CERAMIC	0.0022MF	10%	50V	Q155	8-729-245-83	TRANSISTOR 2SC2458			
C188	1-102-125-00	CERAMIC	0.0047MF	10%	50V	Q156	8-729-245-83	TRANSISTOR 2SC2458			
		<u>DISCRIMINATOR</u>				Q157	8-729-900-89	TRANSISTOR DTC144ES			
CD151	1-404-501-00	DISCRIMINATOR, CERAMIC				Q158	8-729-900-89	TRANSISTOR DTC144ES			
		<u>FILTER</u>				Q172	8-729-204-83	TRANSISTOR 2SA1048-GR			
CF101	1-527-840-00	FILTER, CERAMIC				Q173	8-729-245-83	TRANSISTOR 2SC2458			
CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)				Q174	8-729-245-83	TRANSISTOR 2SC2458			
CF151	1-527-839-00	FILTER, CERAMIC				Q175	8-729-245-83	TRANSISTOR 2SC2458			
		<u>DIODE</u>						<u>RESISTOR</u>			
D101	8-719-911-19	DIODE	ISS119			R101	1-247-831-00	METAL	1K	5%	1/6W
D102	8-719-911-19	DIODE	ISS119			R102	1-247-831-00	METAL	1K	5%	1/6W
D103	8-719-102-71	DIODE	RD5.6E-N2			R103	1-247-879-00	METAL	100K	5%	1/6W
D104	8-719-911-19	DIODE	ISS119			R104	1-247-879-00	METAL	100K	5%	1/6W
D151	8-719-911-19	DIODE	ISS119			R105	1-247-853-00	METAL	8.2K	5%	1/6W
D152	8-719-911-19	DIODE	ISS119			R106	1-247-843-00	METAL	3.3K	5%	1/6W
D153	8-719-911-19	DIODE	ISS119			R107	1-247-843-00	METAL	3.3K	5%	1/6W
D154	8-719-911-19	DIODE	ISS119			R108	1-247-891-00	METAL	330K	5%	1/6W
D170	8-719-911-19	DIODE	ISS119			R109	1-247-839-00	METAL	2.2K	5%	1/6W
D171	8-719-911-19	DIODE	ISS119			R110	1-247-839-00	METAL	2.2K	5%	1/6W
		<u>IC</u>				R111	1-247-847-00	METAL	4.7K	5%	1/6W
IC102	8-759-909-54	IC	TDA2546A			R112	1-247-815-00	METAL	220	5%	1/6W
IC103	8-759-800-12	IC	LA7920			R113	1-247-845-00	METAL	3.9K	5%	1/6W
IC151	8-759-007-54	IC	TDA4940			R114	1-247-815-00	METAL	220	5%	1/6W
IC152	8-759-007-55	IC	TDA4944			R115	1-247-835-00	METAL	1.5K	5%	1/6W
						R116	1-247-823-00	METAL	470	5%	1/6W
						R118	1-247-815-00	METAL	220	5%	1/6W

H1

H2

D1

D1 D2 D3 D

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>					
<u>RESISTOR</u>																
R1551	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F	●:1-611-015-00	D2 BOARD	*****							
R1552	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F	<u>CAPACITOR</u>									
R1553	1-210-859-00	CARBON	1.2	5%	1/8W	F	C1891A	1-103-384-00	MYLAR	0.039MF	10%	100V				
R1554	1-247-847-00	CARBON	4.7K	5%	1/6W		<u>COIL</u>									
R1555	1-247-831-00	CARBON	1K	5%	1/6W		L1892A	1-450-074-00	COIL, DUST CORE 6.8MMH(HCC)							
R1556	1-247-861-00	CARBON	18K	5%	1/6W		<u>TRANSFORMER</u>									
R1557	1-247-861-00	CARBON	18K	5%	1/6W		T1892A	1-407-849-00	TRANSFORMER, D.F							
R1558	1-247-845-00	CARBON	3.9K	5%	1/6W		*****									
R1559	1-247-844-00	CARBON	3.6K	5%	1/6W		●:1-611-631-11	D3 BOARD	*****							
R1560	1-247-819-00	CARBON	330	5%	1/6W		<u>CAPACITOR</u>									
R1561	1-247-825-00	CARBON	560	5%	1/6W		C1591	1-108-375-00	MYLAR	0.0068MF	10%	100V				
R1562	1-247-861-00	CARBON	18K	5%	1/6W		C1592	1-102-980-00	CERAMIC	270PF	5%	50V				
R1563	1-247-787-00	CARBON	15	5%	1/6W		<u>TRANSISTOR</u>									
R1564	1-247-855-00	CARBON	10K	5%	1/6W		Q1591	8-729-245-83	TRANSISTOR 2SC2458							
R1565	1-206-642-00	METAL OXIDE	120	5%	2W	F	<u>RESISTOR</u>									
R1566	1-247-855-00	CARBON	10K	5%	1/6W		R1591	1-247-893-00	CARBON	390K	5%	1/6W				
R1568	1-247-809-00	CARBON	120	5%	1/6W		R1592	1-247-851-00	CARBON	6.8K	5%	1/6W				
R1569	1-213-124-00	METAL OXIDE	27	5%	1W	F	R1593	1-247-833-00	CARBON	1.2K	5%	1/6W				
R1570	1-244-875-00	CARBON	1.2K	5%	1/2W		*****									
R1571	1-213-135-00	METAL OXIDE	220	5%	1W	F	●:A-1345-439-A	D BOARD, SUB, COMPLETE	*****							
R1573	1-247-889-00	CARBON	270K	5%	1/6W		<u>TERMINAL BOARD, INPUT OUTPUT</u>									
R1574	1-247-855-00	CARBON	10K	5%	1/6W		●:3-646-071-00	HOLDER, WIRE								
R1575	1-246-519-00	CARBON	82K	5%	1/4W		3-701-748-00	CLAMP								
R1577	1-247-853-00	CARBON	8.2K	5%	1/6W		4-343-134-00	RETAINER, AC CORD								
R1579	1-247-865-00	CARBON	27K	5%	1/6W		●:4-363-404-00	HOLDER, IC								
R1580	1-247-775-00	CARBON	4.7	5%	1/6W		<u>SPACER, MICA</u>									
R1581	1-247-775-00	CARBON	4.7	5%	1/6W		●:4-363-414-00	SPACER, MICA								
R1583	1-247-871-00	CARBON	47K	5%	1/6W		●:4-368-658-01	INSULATOR (H)								
R1584	1-217-226-00	WIREWOUND	150	10%	2W	F	●:4-368-659-01	INSULATOR (R)								
R1585	1-247-811-00	CARBON	150	5%	1/6W		<u>CAPACITOR</u>									
R1586	1-247-805-00	CARBON	82	5%	1/6W		C002	1-123-381-00	ELECT	2.2MF	20%	50V				
R1587	1-247-889-00	CARBON	270K	5%	1/6W		C003	1-102-973-00	CERAMIC	100PF	5%	50V				
R1588	1-247-831-00	CARBON	1K	5%	1/6W		C004	1-108-389-00	MYLAR	0.1MF	10%	100V				
<u>VARIABLE RESISTOR</u>																
RV1551	1-230-230-00	RES, ADJ, CERAMIC	CARBON	1K			C005	1-123-356-00	ELECT	10MF	20%	50V				
RV1552	1-230-228-00	RES, ADJ, CERAMIC	CARBON	330			C006	1-102-959-00	CERAMIC	22PF	5%	50V				
RV1553	1-228-824-00	RES, ADJ, CERAMIC	CARBON	10K			C007	1-102-963-00	CERAMIC	33PF	5%	50V				
RV1554	1-228-824-00	RES, ADJ, CERAMIC	CARBON	10K			C008	1-123-356-00	ELECT	10MF	20%	50V				
RV1555	1-230-229-00	RES, ADJ, CERAMIC	CARBON	470			C009	1-102-114-00	CERAMIC	470PF	10%	50V				
RV1556	1-230-228-00	RES, ADJ, CERAMIC	CARBON	330			C010	1-123-328-00	ELECT	4.7MF	20%	25V				
RV1557	1-230-227-00	RES, ADJ, CERAMIC	CARBON	220			C012	1-101-004-00	CERAMIC	0.01MF		50V				
RV1558	1-230-230-00	RES, ADJ, CERAMIC	CARBON	1K												
RV1559	1-228-824-00	RES, ADJ, CERAMIC	CARBON	10K												
RV1560	1-230-237-00	RES, ADJ, CERAMIC	CARBON	100K												
RV1561	1-230-237-00	RES, ADJ, CERAMIC	CARBON	100K												
<u>THERMISTOR</u>																
TH1551	1-800-625-00	THERMISTOR														
TH1552	1-806-110-00	THERMISTOR														

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description		Remark		Ref.No.	Part No.	Description		Remark	
C015	1-123-333-00	ELECT	100MF	20%	16V	C272	1-108-389-00	MYLAR	0.1MF	10%	100V
C016	1-101-810-00	CERAMIC	100PF	5%	500V	C273	1-123-359-00	ELECT	47MF	20%	50V
C018	1-108-389-00	MYLAR	0.1MF	10%	100V	C274	1-123-364-00	ELECT	1000MF	20%	50V
C019	1-123-332-00	ELECT	47MF	20%	25V	C276	1-123-359-00	ELECT	47MF	20%	50V
C020	1-102-030-00	CERAMIC	330PF	10%	500V	C277	1-108-389-00	MYLAR	0.1MF	10%	100V
C021A	1-123-307-00	ELECT	100MF	20%	10V	C278	1-123-364-00	ELECT	1000MF	20%	50V
C022	1-102-125-00	CERAMIC	0.0047MF	10%	50V	C279	1-123-331-00	ELECT	33MF	20%	25V
C050	1-123-381-00	ELECT	2.2MF	20%	50V	C280	1-123-364-00	ELECT	1000MF	20%	50V
C201	1-108-389-00	MYLAR	0.1MF	10%	100V	C281	1-123-360-00	ELECT	100MF	20%	50V
C202	1-108-389-00	MYLAR	0.1MF	10%	100V	C288	1-108-381-00	MYLAR	0.022MF	10%	100V
C203	1-108-389-00	MYLAR	0.1MF	10%	100V	C289	1-108-381-00	MYLAR	0.022MF	10%	100V
C204	1-123-356-00	ELECT	10MF	20%	16V	C290	1-123-331-00	ELECT	33MF	20%	25V
C205	1-123-356-00	ELECT	10MF	20%	16V	C291	1-123-331-00	ELECT	33MF	20%	25V
C206	1-123-318-00	ELECT	33MF	20%	16V	C301	1-102-809-00	CERAMIC	7PF	1PF	50V
C208	1-123-380-00	ELECT	1MF	20%	50V	C302	1-102-809-00	CERAMIC	7PF	1PF	50V
C209	1-102-114-00	CERAMIC	470PF	10%	50V	C304	1-101-006-00	CERAMIC	0.047MF		50V
C210	1-102-074-00	CERAMIC	0.001MF	10%	50V	C305	1-101-006-00	CERAMIC	0.047MF		50V
C211	1-123-380-00	ELECT	1MF	20%	50V	C307	1-102-971-00	CERAMIC	82PF	5%	50V
C212	1-102-114-00	CERAMIC	470PF	10%	50V	C308	1-123-356-00	ELECT	10MF	20%	16V
C213	1-102-074-00	CERAMIC	0.001MF	10%	50V	C309	1-102-113-00	CERAMIC	390PF	10%	50V
C214	1-123-309-00	ELECT	330MF	20%	10V	C310	1-101-004-00	CERAMIC	0.01MF		50V
C215	1-123-332-00	ELECT	47MF	20%	16V	C311	1-123-323-00	ELECT	470MF	20%	16V
C216	1-108-383-00	MYLAR	0.033MF	10%	100V	C312	1-123-286-00	ELECT	0.33MF	20%	50V
C217	1-123-356-00	ELECT	10MF	20%	16V	C313	1-123-328-00	ELECT	4.7MF	20%	25V
C218	1-123-332-00	ELECT	47MF	20%	16V	C314	1-123-381-00	ELECT	2.2MF	20%	50V
C219	1-123-380-00	ELECT	1MF	20%	50V	C315	1-123-381-00	ELECT	2.2MF	20%	50V
C220	1-123-380-00	ELECT	1MF	20%	50V	C316	1-101-880-00	CERAMIC	47PF	5%	50V
C221	1-108-367-00	MYLAR	0.0015MF	10%	100V	C317	1-108-381-00	MYLAR	0.022MF	10%	100V
C222	1-101-004-00	CERAMIC	0.01MF		50V	C318	1-131-345-00	TANTALUM	0.47MF	20%	35V
C223	1-123-333-00	ELECT	100MF	20%	16V	C319	1-123-330-00	ELECT	22MF	20%	16V
C249	1-123-379-00	ELECT	0.47MF	20%	50V	C320	1-123-380-00	ELECT	1MF	20%	50V
C250	1-102-108-00	CERAMIC	150PF	10%	50V	C321	1-131-345-00	TANTALUM	0.47MF	20%	35V
C251	1-123-380-00	ELECT	1MF	20%	50V	C322	1-131-345-00	TANTALUM	0.47MF	20%	35V
C252	1-123-380-00	ELECT	1MF	20%	50V	C323	1-102-110-00	CERAMIC	220PF	10%	50V
C253	1-123-380-00	ELECT	1MF	20%	50V	C324	1-102-110-00	CERAMIC	220PF	10%	50V
C254	1-123-380-00	ELECT	1MF	20%	50V	C325	1-130-640-00	FILM	0.47MF	5%	50V
C255	1-123-380-00	ELECT	1MF	20%	50V	C326	1-130-640-00	FILM	0.47MF	5%	50V
C256	1-108-373-00	MYLAR	0.0047MF	10%	100V	C327	1-121-705-00	ELECT	2.2MF	30%	25V
C257	1-108-390-00	MYLAR	0.12MF	10%	100V	C328	1-102-973-00	CERAMIC	100PF	5%	50V
C258	1-108-373-00	MYLAR	0.0047MF	10%	100V	C329	1-101-004-00	CERAMIC	0.01MF		50V
C259	1-108-390-00	MYLAR	0.12MF	10%	100V	C331	1-102-129-00	CERAMIC	0.01MF	10%	50V
C260	1-123-323-00	ELECT	470MF	20%	16V	C332	1-102-973-00	CERAMIC	100PF	5%	50V
C261	1-123-379-00	ELECT	0.47MF	20%	50V	C333	1-123-318-00	ELECT	33MF	20%	16V
C262	1-108-383-00	MYLAR	0.033MF	10%	100V	C334	1-123-356-00	ELECT	10MF	20%	16V
C263	1-102-114-00	CERAMIC	470PF	10%	50V	C335	1-130-640-00	FILM	0.47MF	5%	50V
C264	1-123-330-00	ELECT	22MF	20%	16V	C336	1-102-858-00	CERAMIC	10PF	0.5PF	50V
C265	1-123-379-00	ELECT	0.47MF	20%	50V	C337	1-102-888-00	CERAMIC	150PF	5%	50V
C266	1-102-108-00	CERAMIC	150PF	10%	50V	C337A	1-102-676-00	CERAMIC	68PF	5%	50V
C267	1-123-379-00	ELECT	0.47MF	20%	50V	C338	1-102-884-00	CERAMIC	33PF	5%	50V
C268	1-102-114-00	CERAMIC	470PF	10%	50V	C339	1-102-959-00	CERAMIC	22PF	5%	50V
C269	1-123-379-00	ELECT	0.47MF	20%	50V	C340	1-102-945-00	CERAMIC	8PF	1PF	50V
C270	1-123-330-00	ELECT	22MF	20%	16V	C341	1-102-947-00	CERAMIC	10PF	5%	50V
C271	1-123-379-00	ELECT	0.47MF	20%	50V	C343	1-102-973-00	CERAMIC	100PF	5%	50V

D

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>		<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>	
C344	1-123-379-00	ELECT	0.47MF	20%	50V	C660	1-123-380-00	ELECT	1MF	20%	50V
C345	1-130-634-00	FILM	0.15MF	5%	50V	C661	1-108-374-00	MYLAR	0.0056MF	10%	100V
C346	1-123-333-00	ELECT	100MF	20%	16V	C662	1-130-022-00	FILM	0.0022MF	5%	50V
C503	1-108-377-00	MYLAR	0.01MF	10%	100V	C663	1-123-330-00	ELECT	22MF	20%	16V
C504	1-130-019-00	FILM	0.0012MF	5%	50V	C664	1-123-354-00	ELECT	3.3MF	20%	50V
C505	1-108-385-00	MYLAR	0.047MF	10%	100V	C666	1-101-810-00	CERAMIC	100PF	5%	500V
C506	1-123-296-00	ELECT	220MF	20%	6.3V	C801	1-102-038-00	CERAMIC	0.001MF	500V	
C507	1-123-321-00	ELECT	220MF	20%	16V	C802	1-108-417-00	MYLAR	0.0047MF	10%	200V
C508	1-130-635-00	FILM	0.18MF	5%	50V	C803	1-102-327-00	CERAMIC	330PF	15%	1.5KV
C509	1-123-356-00	ELECT	10MF	20%	16V	C804	1-161-754-00	CERAMIC	0.001MF	10%	3KV
C510	1-123-330-00	ELECT	22MF	20%	16V	C805	1-108-423-00	MYLAR	0.015MF	10%	200V
C511	1-123-381-00	ELECT	2.2MF	20%	50V	C806	1-129-722-00	FILM	0.047MF	10%	630V
C512	1-102-108-00	CERAMIC	150PF	10%	50V	C807	1-136-186-00	FILM	2.4MF	5%	200V
C513	1-123-380-00	ELECT	1MF	20%	50V	C808	1-136-116-00	FILM	1MF	5%	200V
C514	1-130-640-00	FILM	0.47MF	5%	50V	C810	1-108-377-00	MYLAR	0.01MF	10%	100V
C515	1-123-337-00	ELECT	1000MF	20%	25V	C811	1-123-379-00	ELECT	0.47MF	20%	50V
C516	1-108-371-00	MYLAR	0.0033MF	10%	100V	C812	1-102-223-00	CERAMIC	0.0047MF	10%	2KV
C517	1-131-371-00	TANTALUM	10MF	10%	16V	C813	1-108-389-00	MYLAR	0.1MF	10%	100V
C518	1-108-389-00	MYLAR	0.1MF	10%	100V	C814	1-123-005-00	ELECT	22MF	250V	
C519	1-108-365-00	MYLAR	0.001MF	10%	100V	C815	1-123-348-00	ELECT	470MF	20%	35V
C520	1-123-333-00	ELECT	100MF	20%	25V	C816	1-102-030-00	CERAMIC	330PF	10%	500V
C521	1-108-377-00	MYLAR	0.01MF	10%	100V	C818	1-130-894-00	FILM	0.022MF	3%	1.2KV
C522	1-123-333-00	ELECT	100MF	20%	16V	C819	1-129-704-00	FILM	0.0015MF	10%	630V
C525	1-123-330-00	ELECT	22MF	20%	16V	C824	1-108-381-00	MYLAR	0.022MF	10%	100V
C526	1-123-360-00	ELECT	100MF	20%	50V	C825	1-136-184-00	MYLAR	0.68MF	10%	250V
C527	1-108-373-00	MYLAR	0.0047MF	10%	100V	C826	1-108-365-00	MYLAR	0.001MF	10%	100V
C529	1-123-318-00	ELECT	33MF	20%	16V						
C530	1-108-367-00	MYLAR	0.0015MF	10%	100V						
C531	1-123-356-00	ELECT	10MF	20%	16V						
C532	1-123-319-00	ELECT	47MF	20%	16V						
C533	1-123-379-00	ELECT	0.47MF	20%	50V						
C591	1-130-640-00	FILM	0.47MF	5%	50V						
C602	A. 1-108-747-00	MYLAR	0.1MF	20%	300V	CF001	1-527-790-00	OSCILLATOR, CERAMIC			
C605	A. 1-161-738-00	CERAMIC	0.0047MF	20%	400V						
C606	A. 1-161-738-00	CERAMIC	0.0047MF	20%	400V						
C607	A. 1-161-964-00	CERAMIC	0.0047MF		250V						
C608	A. 1-161-964-00	CERAMIC	0.0047MF		250V						
C609	1-161-964-00	CERAMIC	0.0047MF		250V						
C610	1-125-167-00	ELECT(BLOCK)	250MF		400V						
C611	1-108-381-00	MYLAR	0.022MF	10%	100V						
C612	1-136-064-00	FILM	0.002MF	3%	2KV	D1	▲:1-560-288-00	PLUG, CONNECTOR (2.5MM PITCH)			
C613	1-123-381-00	ELECT	2.2MF	20%	100V	D2	▲:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)			
C615	1-123-354-00	ELECT	3.3MF	20%	50V	D3	▲:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
C616	1-102-121-00	CERAMIC	0.0022MF	10%	50V	D4	▲:1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P			
C617	1-123-354-00	ELECT	3.3MF	20%	50V	D5	▲:1-506-348-XX	3P PLUG (L)			
C618	1-108-409-00	MYLAR	0.001MF	10%	200V	D6	▲:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)			
C651	1-102-155-00	CERAMIC	330PF	20%	2KV	D8	▲:1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)			
C652	1-124-347-00	ELECT	100MF	20%	160V	D9	▲:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
C653	1-123-372-00	ELECT	33MF	20%	50V	D10	▲:1-508-765-00	3P PLUG (M)			
C654	1-123-364-00	ELECT	1000MF	20%	50V	D12	▲:1-508-786-00	2P PLUG (M)			
C656	1-123-606-00	ELECT	1000MF	20%	25V	D14	▲:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P			
C657	1-123-311-00	ELECT	1000MF	20%	10V	D15	▲:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)			
C659	1-123-354-00	ELECT	3.3MF	20%	50V	D16	▲:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)			
						D17	▲:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P			
						D18	▲:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P			

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

A C

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R119	1-247-823-00	METAL	470 5% 1/6W			TUNER	
R120	1-247-871-00	METAL	47K 5% 1/6W			TU101A 1-463-421-21 TUNER, ET (BT-883)	
R122	1-247-855-00	METAL	10K 5% 1/6W			*****	*****
R123	1-247-861-00	METAL	18K 5% 1/6W			*****	*****
R124	1-247-857-00	METAL	12K 5% 1/6W			*****	*****
R125	1-247-829-00	METAL	820 5% 1/6W			●:A-1330-470-A C BOARD, COMPLETE	*****
R126	1-247-829-00	METAL	820 5% 1/6W			1-526-644-41 SOCKET, CRT	
R127	1-247-829-00	METAL	820 5% 1/6W			CONNECTOR	
R129	1-247-886-00	METAL	200K 5% 1/6W		C1	●:1-508-765-00 3P PLUG (M)	
R131	1-247-871-00	METAL	47K 5% 1/6W		C2	●:1-560-290-00 PLUG, CONNECTOR (2.5MM PITCH)	
R132	1-247-855-00	METAL	10K 5% 1/6W		C3	●:1-560-123-00 PLUG, CONNECTOR (2.5MM) 3P	
R134	1-247-875-00	METAL	68K 5% 1/6W			CAPACITOR	
R135	1-247-873-00	METAL	56K 5% 1/6W		C701	1-102-973-00 CERAMIC	100PF 5% 50V
R136	1-247-863-00	METAL	22K 5% 1/6W		C702	1-102-973-00 CERAMIC	100PF 5% 50V
R137	1-247-863-00	METAL	22K 5% 1/6W		C703	1-102-973-00 CERAMIC	100PF 5% 50V
R151	1-247-831-00	METAL	1K 5% 1/6W		C704	1-121-759-00 ELECT	4.7MF 250V
R152	1-247-869-00	METAL	39K 5% 1/6W		C705	1-102-249-00 CERAMIC	680PF 20% 2KV
R153	1-247-821-00	METAL	390 5% 1/6W		C706	1-129-779-00 FILM	0.022MF 20% 1KV
R155	1-247-863-00	METAL	22K 5% 1/6W		C707	1-123-383-00 ELECT	4.7MF 20% 100V
R156	1-247-877-00	METAL	82K 5% 1/6W		C708	1-123-333-00 ELECT	100MF 20% 25V
R157	1-247-833-00	METAL	1.2K 5% 1/6W		C711	1-123-356-00 ELECT	10MF 20% 50V
R158	1-247-833-00	METAL	1.2K 5% 1/6W		C751	1-101-361-00 CERAMIC	150PF 5% 50V
R159	1-247-847-00	METAL	4.7K 5% 1/6W			DIODE	
R160	1-247-847-00	METAL	4.7K 5% 1/6W		D701	8-719-104-10 DIODE ISS99	
R161	1-247-847-00	METAL	4.7K 5% 1/6W		D702	8-719-104-10 DIODE ISS99	
R162	1-247-847-00	METAL	4.7K 5% 1/6W		D703	8-719-104-10 DIODE ISS99	
R166	1-247-843-00	METAL	3.3K 5% 1/6W		D704	8-719-100-68 DIODE RD13E-B2	
R167	1-247-867-00	METAL	33K 5% 1/6W		D705	8-719-911-19 DIODE ISS119	
R168	1-247-863-00	METAL	22K 5% 1/6W		D706	8-719-911-19 DIODE ISS119	
R172	1-247-813-00	METAL	180 5% 1/6W		D707	8-719-911-19 DIODE ISS119	
R173	1-247-871-00	METAL	47K 5% 1/6W		D708	8-719-911-19 DIODE ISS119	
R174	1-247-889-00	METAL	270K 5% 1/6W		D709	8-719-911-19 DIODE ISS119	
R175	1-247-865-00	METAL	27K 5% 1/6W		D710	8-719-911-19 DIODE ISS119	
R176	1-247-831-00	METAL	1K 5% 1/6W		D711	8-719-911-19 DIODE ISS119	
R177	1-247-855-00	METAL	10K 5% 1/6W			COIL	
R178	1-247-855-00	METAL	10K 5% 1/6W		L751	1-408-413-00 MICRO INDUCTOR 22UH	
R179	1-247-855-00	METAL	10K 5% 1/6W			NEON LAMP	
R180	1-247-831-00	METAL	1K 5% 1/6W		NL701	1-519-108-XX LAMP, NEON ASSY	
R181	1-247-833-00	METAL	1.2K 5% 1/6W				
R182	1-247-839-00	METAL	2.2K 5% 1/6W				
R183	1-247-831-00	METAL	1K 5% 1/6W				
R184	1-247-817-00	METAL	270 5% 1/6W				
R185	1-247-819-00	METAL	330 5% 1/6W				
R186	1-247-861-00	METAL	18K 5% 1/6W				
R188	1-247-159-00	METAL	15K 5% 1/4W				
<u>VARIABLE RESISTOR</u>							
RV101	1-228-727-00	RES, ADJ, CERAMIC CARBON	47K				
RV151	1-228-726-00	RES, ADJ, CERAMIC CARBON	33K				
<u>FILTER</u>							
SWF101	1-404-438-00	FILTER, SAW					

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

C H1

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	
<u>TRANSISTOR</u>								
Q701	8-729-245-83	TRANSISTOR 2SC2458		R733	1-202-719-00	SOLID	1M 10% 1/2W	
Q702	8-729-245-83	TRANSISTOR 2SC2458		R734	1-202-609-00	SOLID	33K 1/2W	
Q703	8-729-245-83	TRANSISTOR 2SC2458		R735	1-202-629-00	SOLID	220K 1/2W	
Q704	8-729-322-78	TRANSISTOR 2SC2278		R736	1-202-846-00	SOLID	470K 1/2W	
Q705	8-729-322-78	TRANSISTOR 2SC2278		R737	1-247-813-00	CARBON	180 5% 1/6W	
Q706	8-729-322-78	TRANSISTOR 2SC2278		R738	1-246-477-00	CARBON	1.5K 5% 1/4W	
Q707	8-729-255-12	TRANSISTOR 2SC2551		R739	1-246-497-00	CARBON	10K 5% 1/4W	
Q708	8-729-255-12	TRANSISTOR 2SC2551		R740	1-207-451-00	WIREWOUND	0.1 10% 1/2W	
Q709	8-729-255-12	TRANSISTOR 2SC2551		R746	1-247-871-00	CARBON	47K 5% 1/6W	
Q710	8-729-200-17	TRANSISTOR 2SA1091		R747	1-247-855-00	CARBON	10K 5% 1/6W	
Q711	8-729-200-17	TRANSISTOR 2SA1091		R751	1-247-833-00	CARBON	1.2K 5% 1/6W	
Q712	8-729-200-17	TRANSISTOR 2SA1091		R752	1-247-849-00	CARBON	5.6K 5% 1/6W	
Q713	8-729-245-83	TRANSISTOR 2SC2458		R753	1-247-825-00	CARBON	560 5% 1/6W	
Q751	8-729-245-83	TRANSISTOR 2SC2458		R754	1-247-865-00	CARBON	27K 5% 1/6W	
Q752	8-729-245-83	TRANSISTOR 2SC2458		R755	1-247-807-00	CARBON	100 5% 1/6W	
Q753	8-729-103-43	TRANSISTOR 2SB734-4		R756	1-247-835-00	CARBON	1.5K 5% 1/6W	
Q754	8-729-177-43	TRANSISTOR 2SD774-4		R757	1-247-807-00	CARBON	100 5% 1/6W	
<u>RESISTOR</u>								
R701	1-247-855-00	CARBON	10K 5% 1/6W	R760	1-247-819-00	CARBON	330 5% 1/6W	
R702	1-247-855-00	CARBON	10K 5% 1/6W	R761	1-247-855-00	CARBON	10K 5% 1/6W	
R703	1-247-855-00	CARBON	10K 5% 1/6W	R762	1-247-895-00	CARBON	470K 5% 1/6W	
R704	1-247-837-00	CARBON	1.8K 5% 1/6W	R763	1-247-855-00	CARBON	10K 5% 1/6W	
R705	1-247-837-00	CARBON	1.8K 5% 1/6W	R764	1-246-981-00	CARBON	4.7 5% 1/8W	
R706	1-247-837-00	CARBON	1.8K 5% 1/6W	R765	1-246-981-00	CARBON	4.7 5% 1/8W	
R707	1-247-855-00	CARBON	10K 5% 1/6W	R766	1-247-833-00	CARBON	1.2K 5% 1/6W	
R708	1-247-855-00	CARBON	10K 5% 1/6W	R767	1-247-837-00	CARBON	1.8K 5% 1/6W	
R709	1-247-855-00	CARBON	10K 5% 1/6W	R768	1-247-801-00	CARBON	56 5% 1/6W	
R710	1-247-826-00	CARBON	620 5% 1/6W	R769	1-212-889-00	FUSIBLE	220 5% 1/4W	
<u>VARIABLE RESISTOR</u>								
R711	1-247-826-00	CARBON	620 5% 1/6W	RV701	1-228-721-00	RES, ADJ, CERAMIC	CARBON 2.2K	
R712	1-247-826-00	CARBON	620 5% 1/6W	RV702	1-228-721-00	RES, ADJ, CERAMIC	CARBON 2.2K	
R713	1-206-692-00	METAL OXIDE	15K 5% 2W F	RV703	1-226-157-00	RES, ADJ, METAL GLAZE	1M	
R714	1-206-692-00	METAL OXIDE	15K 5% 2W F	<u>SPARK GAP</u>				
R715	1-206-692-00	METAL OXIDE	15K 5% 2W F	S G701	1-519-063-XX	DISCHARGING GAP		
R716	1-247-038-00	CARBON	560 5% 1/8W F	S G702	1-519-063-XX	DISCHARGING GAP		
R717	1-247-038-00	CARBON	560 5% 1/8W F	S G703	1-519-063-XX	DISCHARGING GAP		
R718	1-247-038-00	CARBON	560 5% 1/8W F	*****				
R719	1-213-163-00	METAL OXIDE	47K 5% 1W F	•:1-611-013-00 H1 BOARD				
R720	1-213-163-00	METAL OXIDE	47K 5% 1W F	*****				
R721	1-213-163-00	METAL OXIDE	47K 5% 1W F	<u>CAPACITOR</u>				
R722	1-202-824-00	SOLID	3.3K 1/2W	C401	1-123-617-00	ELECT	10MF 20% 16V	
R723	1-202-824-00	SOLID	3.3K 1/2W	C402	1-123-617-00	ELECT	10MF 20% 16V	
R724	1-202-824-00	SOLID	3.3K 1/2W	<u>DIODE</u>				
R725	1-246-497-00	CARBON	10K 5% 1/4W	D401	8-719-911-19	DIODE	ISS119	
R726	1-214-964-00	METAL	1M 1% 1/4W	D402	8-719-911-19	DIODE	ISS119	
R727	1-246-497-00	CARBON	10K 5% 1/4W	D403	8-719-911-19	DIODE	ISS119	
R728	1-214-960-00	METAL	680K 1% 1/4W	D404	8-719-911-19	DIODE	ISS119	
R729	1-214-788-00	METAL	300K 1% 1/4W					
R730	1-202-838-00	SOLID	100K 1/2W					
R731	1-202-631-00	SOLID	270K 1/2W					
R732	1-202-609-00	SOLID	33K 1/2W					

D

Remark

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
D19	●:1-564-346-00	CONNECTOR, BOARD TO BOARD 18P		D661	8-719-102-78	DIODE RD6.8E-N2	
D20	●:1-564-346-00	CONNECTOR, BOARD TO BOARD 18P		D801	8-719-900-26	DIODE ERD29-08J	
D21	●:1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)		D802	8-719-903-09	DIODE V30N	
D22	●:1-560-127-00	PLUG, CONNECTOR (2.5MM PITCH)		D803	8-719-924-06	DIODE ERC24-06S	
D23	●:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)		D804	8-719-901-93	DIODE V19E	
D24	●:1-508-784-00	1P PLUG		D805	8-719-305-15	DIODE GH3F	
D32	●:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)		D806	8-719-305-15	DIODE GH3F	
			<u>DIODE</u>	D810	8-719-907-40	DIODE ERB43-02	
D001	8-719-911-19	DIODE ISS119					
D002	8-719-911-19	DIODE ISS119					
D004	8-719-911-19	DIODE ISS119					
D005	8-759-157-40	IC UPC574J					
D006	8-719-101-02	DIODE RD30E-B4					
D008	8-719-911-19	DIODE ISS119					
D009	8-719-101-35	DIODE RD3.0E-L2					
D010	8-719-911-19	DIODE ISS119					
D060	8-719-911-19	DIODE ISS119					
D061	8-719-100-35	DIODE RD5.6E-B2					
D201	8-719-911-19	DIODE ISS119					
D202	8-719-911-19	DIODE ISS119					
D203	8-719-911-19	DIODE ISS119					
D204	8-719-911-19	DIODE ISS119					
D205	8-719-911-19	DIODE ISS119					
D206	8-719-911-19	DIODE ISS119					
D208	8-719-100-66	DIODE RD12E-B3					
D251	8-719-100-43	DIODE RD7.5E-B1					
D252	8-719-911-19	DIODE ISS119					
D253	8-719-911-19	DIODE ISS119					
D301	8-719-911-19	DIODE ISS119					
D302	8-719-026-11	DIODE IT261					
D303	8-719-911-19	DIODE ISS119					
D307	8-719-911-19	DIODE ISS119					
D308	8-719-911-19	DIODE ISS119					
D309	8-719-911-19	DIODE ISS119					
D501	8-719-911-55	DIODE U05G					
D502	8-719-906-98	DIODE EQA01-22R2					
D503	8-719-992-42	DIODE EQA01-24R2					
D504	8-719-102-78	DIODE RD6.8E-N2					
D506	8-719-911-19	DIODE ISS119					
D507	8-719-911-19	DIODE ISS119					
D508	8-719-911-19	DIODE ISS119					
D601	8-719-503-06	DIODE S3WB60Z					
D602	8-719-924-06	DIODE ERC24-06S					
D603	8-719-911-19	DIODE ISS119					
D651	8-719-928-08	DIODE ERD28-08					
D652	8-719-924-06	DIODE ERC24-06S					
D653	8-719-901-93	DIODE V19E					
D654	8-719-300-59	DIODE CTU12S					
D655	8-719-901-93	DIODE V19E					
D656	8-719-982-04	DIODE ERB81-004					
D657	8-719-102-68	DIODE RD5.1E-N2					
D659	8-719-911-19	DIODE ISS119					
			<u>COIL</u>	L251	1-408-300-00	MICRO INDUCTOR 6.8UH	
				L252	1-408-300-00	MICRO INDUCTOR 6.8UH	
				L301	1-404-495-00	COIL	
				L302	1-408-421-00	MICRO INDUCTOR 100UH	
				L304	1-408-408-00	MICRO INDUCTOR 8.2UH	
				L305	1-408-227-00	MICRO INDUCTOR 470UH	
				L306	1-404-494-00	COIL	
				L307	1-404-498-00	COIL	
				L308	1-408-415-00	MICRO INDUCTOR 33UH	
				L309	1-408-414-00	MICRO INDUCTOR 27UH	
				L601	1-407-365-00	COIL, CHOKE 0.7UH	
				L651	1-425-613-00	COIL, AIR-CORE, QF TYPE	
				L652	1-459-442-00	COIL (WITH CORE)	
				L801	1-407-365-00	COIL, CHOKE 0.7UH	
				L802	1-408-225-00	MICRO INDUCTOR 3.3UH	
				L803	1-459-224-00	HLC	
				L804	1-421-390-00	COIL, FERRITE (PMC)	
				L805	1-408-239-00	MICRO INDUCTOR 4.7MMH	
				L806	1-421-329-00	COIL, CHOKE	
				L807	1-408-225-00	MICRO INDUCTOR 3.3UH	
				L808	1-407-365-00	COIL, CHOKE 0.7UH	
				L809	1-459-115-00	COIL, DCC-H	
				L810	1-408-240-00	MICRO INDUCTOR 6.8MMH	

D

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
L811	1-407-365-00	COIL, CHOKE		R001	1-247-831-00	CARBON	1K 5% 1/6W
L891	1-459-443-00	COIL, FERRITE		R002	1-247-831-00	CARBON	1K 5% 1/6W
		<u>TRANSISTOR</u>		R003	1-247-831-00	CARBON	1K 5% 1/6W
Q001	8-729-204-83	TRANSISTOR 2SA1048-GR		R004	1-247-815-00	CARBON	220 5% 1/6W
Q002	8-729-204-83	TRANSISTOR 2SA1048-GR		R005	1-247-815-00	CARBON	220 5% 1/6W
Q003	8-729-245-83	TRANSISTOR 2SC2458		R006	1-247-815-00	CARBON	220 5% 1/6W
Q004	8-729-245-83	TRANSISTOR 2SC2458		R007	1-247-815-00	CARBON	220 5% 1/6W
Q006	8-729-245-83	TRANSISTOR 2SC2458		R008	1-247-815-00	CARBON	220 5% 1/6W
Q007	8-724-375-01	TRANSISTOR 2SC403C		R009	1-247-815-00	CARBON	220 5% 1/6W
Q008	8-729-245-83	TRANSISTOR 2SC2458		R010	1-247-815-00	CARBON	220 5% 1/6W
Q009	8-729-245-83	TRANSISTOR 2SC2458		R011	1-247-815-00	CARBON	220 5% 1/6W
Q011	8-729-245-83	TRANSISTOR 2SC2458		R012	1-247-799-00	CARBON	47 5% 1/6W
Q012	8-729-245-83	TRANSISTOR 2SC2458		R013	1-247-815-00	CARBON	220 5% 1/6W
Q201	8-729-204-83	TRANSISTOR 2SA1048-GR		R014	1-247-847-00	CARBON	4.7K 5% 1/6W
Q202	8-729-245-83	TRANSISTOR 2SC2458		R015	1-247-847-00	CARBON	4.7K 5% 1/6W
Q203	8-729-204-83	TRANSISTOR 2SA1048-GR		R016	1-246-489-00	CARBON	4.7K 5% 1/4W
Q204	8-729-245-83	TRANSISTOR 2SC2458		R018	1-247-831-00	CARBON	1K 5% 1/6W
Q205	8-729-245-83	TRANSISTOR 2SC2458		R019	1-247-875-00	CARBON	68K 5% 1/6W
Q206	8-729-204-83	TRANSISTOR 2SA1048-GR		R021	1-247-859-00	CARBON	15K 5% 1/6W
Q207	8-729-204-83	TRANSISTOR 2SA1048-GR		R022	1-247-859-00	CARBON	15K 5% 1/6W
Q208	8-729-204-83	TRANSISTOR 2SA1048-GR		R023	1-247-807-00	CARBON	100 5% 1/6W
Q251	8-729-245-83	TRANSISTOR 2SC2458		R024	1-246-501-00	CARBON	15K 5% 1/4W
Q252	8-729-245-83	TRANSISTOR 2SC2458		R025	1-247-863-00	CARBON	22K 5% 1/6W
Q253	8-729-245-83	TRANSISTOR 2SC2458		R027	1-247-863-00	CARBON	22K 5% 1/6W
Q254	8-729-245-83	TRANSISTOR 2SC2458		R028	1-247-863-00	CARBON	22K 5% 1/6W
Q301	8-729-245-83	TRANSISTOR 2SC2458		R029	1-247-863-00	CARBON	22K 5% 1/6W
Q302	8-765-222-20	TRANSISTOR 2SC1963		R030	1-247-863-00	CARBON	22K 5% 1/6W
Q303	8-729-245-83	TRANSISTOR 2SC2458		R031	1-247-863-00	CARBON	22K 5% 1/6W
Q304	8-729-245-83	TRANSISTOR 2SC2458		R032	1-247-863-00	CARBON	22K 5% 1/6W
Q305	8-729-245-83	TRANSISTOR 2SC2458		R033	1-247-863-00	CARBON	22K 5% 1/6W
Q306	8-729-245-83	TRANSISTOR 2SC2458		R034	1-247-863-00	CARBON	22K 5% 1/6W
Q307	8-729-245-83	TRANSISTOR 2SC2458		R035	1-247-863-00	CARBON	22K 5% 1/6W
Q308	8-729-245-83	TRANSISTOR 2SC2458		R037	1-247-831-00	CARBON	1K 5% 1/6W
Q309	8-729-245-83	TRANSISTOR 2SC2458		R038	1-247-841-00	CARBON	2.7K 5% 1/6W
Q310	8-729-245-83	TRANSISTOR 2SC2458		R039	1-247-807-00	CARBON	100 5% 1/6W
Q311	8-729-245-83	TRANSISTOR 2SC2458		R040	1-247-863-00	CARBON	22K 5% 1/6W
Q312	8-729-245-83	TRANSISTOR 2SC2458		R041	1-247-867-00	CARBON	33K 5% 1/6W
Q313	8-729-245-83	TRANSISTOR 2SC2458		R042	1-247-823-00	CARBON	470 5% 1/6W
Q314	8-729-900-36	TRANSISTOR DTC124ES		R043	1-247-823-00	CARBON	470 5% 1/6W
Q501	8-729-204-83	TRANSISTOR 2SA1048-GR		R044	1-247-831-00	CARBON	1K 5% 1/6W
Q502	8-729-204-83	TRANSISTOR 2SA1048-GR		R045	1-247-831-00	CARBON	1K 5% 1/6W
Q602	8-729-213-12	TRANSISTOR 2SC2230A		R046	1-247-847-00	CARBON	4.7K 5% 1/6W
Q603	8-729-301-00	TRANSISTOR 2SD1497-02		R047	1-247-807-00	CARBON	100 5% 1/6W
Q654	8-729-245-83	TRANSISTOR 2SC2458		R048	1-247-871-00	CARBON	47K 5% 1/6W
Q655	8-729-109-53	TRANSISTOR 2SD795A		R049	1-247-863-00	CARBON	22K 5% 1/6W
Q656	8-729-245-83	TRANSISTOR 2SC2458		R050	1-247-831-00	CARBON	1K 5% 1/6W
Q801	8-729-323-82	TRANSISTOR 2SD1138-02-C		R051	1-247-831-00	CARBON	1K 5% 1/6W
Q802	8-729-300-90	TRANSISTOR 2SD1497-06		R052	1-247-831-00	CARBON	1K 5% 1/6W
Q803	8-726-400-02	THYRISTOR SG264A		R053	1-247-883-00	CARBON	150K 5% 1/6W
	2-825-006-00	SPACER, MICA, Q803		R055	1-247-847-00	CARBON	4.7K 5% 1/6W
	3-703-320-00	BUSHING (A), TRANSISTOR, Q803					
◆ 4-309-762-00 RETAINER (MD-17), TRANSISTOR, Q803				R056	1-247-859-00	CARBON	15K 5% 1/6W

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R057	1-246-497-00	CARBON	10K 5% 1/4W	R261	1-247-843-00	CARBON	3.3K 5% 1/6W
R060	1-247-819-00	CARBON	330 5% 1/6W	R262	1-217-393-00	FUSIBLE	33 5% 1/4W F
R201	1-247-869-00	CARBON	39K 5% 1/6W	R263	1-247-869-00	CARBON	39K 5% 1/6W
R202	1-247-831-00	CARBON	1K 5% 1/6W	R264	1-247-874-00	CARBON	62K 5% 1/6W
R203	1-247-804-00	CARBON	75 5% 1/6W	R265	1-247-845-00	CARBON	3.9K 5% 1/6W
R204A	1-246-446-00	CARBON	75 5% 1/4W	R266	1-247-855-00	CARBON	10K 5% 1/6W
R205A	1-246-446-00	CARBON	75 5% 1/4W	R267	1-247-903-00	CARBON	1M 5% 1/6W
R206A	1-246-446-00	CARBON	75 5% 1/4W	R268	1-247-831-00	CARBON	1K 5% 1/6W
R207	1-247-867-00	CARBON	33K 5% 1/6W	R269	1-247-863-00	CARBON	22K 5% 1/6W
R208	1-247-863-00	CARBON	22K 5% 1/6W	R270	1-246-471-00	CARBON	820 5% 1/4W
R209	1-246-489-00	CARBON	4.7K 5% 1/4W	R273	1-247-875-00	CARBON	68K 5% 1/6W
R210	1-246-489-00	CARBON	4.7K 5% 1/4W	R274	1-247-847-00	CARBON	4.7K 5% 1/6W
R211	1-247-853-00	CARBON	8.2K 5% 1/6W	R275	1-247-855-00	CARBON	10K 5% 1/6W
R212	1-247-821-00	CARBON	390 5% 1/6W	R276	1-246-471-00	CARBON	820 5% 1/4W
R213	1-247-783-00	CARBON	10 5% 1/6W	R277	1-247-855-00	CARBON	10K 5% 1/6W
R214	1-247-811-00	CARBON	150 5% 1/6W	R280	1-247-879-00	CARBON	100K 5% 1/6W
R215	1-247-831-00	CARBON	1K 5% 1/6W	R281	1-247-849-00	CARBON	5.6K 5% 1/6W
R216	1-247-831-00	CARBON	1K 5% 1/6W	R282	1-247-847-00	CARBON	4.7K 5% 1/6W
R217	1-247-855-00	CARBON	10K 5% 1/6W	R284	1-247-005-00	CARBON	100 5% 1/4W F
R218	1-247-804-00	CARBON	75 5% 1/6W	R285	1-247-847-00	CARBON	4.7K 5% 1/6W
R219	1-247-031-00	CARBON	27 5% 1/8W F	R286	1-247-849-00	CARBON	5.6K 5% 1/6W
R220	1-247-831-00	CARBON	1K 5% 1/6W	R287	1-247-879-00	CARBON	100K 5% 1/6W
R221	1-247-831-00	CARBON	1K 5% 1/6W	R288	1-247-881-00	CARBON	120K 5% 1/6W
R224	1-247-823-00	CARBON	470 5% 1/6W	R289	1-247-871-00	CARBON	47K 5% 1/6W
R225	1-247-807-00	CARBON	100 5% 1/6W	R297	1-247-831-00	CARBON	1K 5% 1/6W
R226	1-247-807-00	CARBON	100 5% 1/6W	R298	1-247-831-00	CARBON	1K 5% 1/6W
R227	1-247-807-00	CARBON	100 5% 1/6W	R301	1-247-835-00	CARBON	1.5K 5% 1/6W
R228	1-247-807-00	CARBON	100 5% 1/6W	R302	1-247-835-00	CARBON	1.5K 5% 1/6W
R229	1-247-807-00	CARBON	100 5% 1/6W	R303	1-247-816-00	CARBON	240 5% 1/6W
R230	1-246-497-00	CARBON	10K 5% 1/4W	R304	1-247-837-00	CARBON	1.8K 5% 1/6W
R231	1-247-831-00	CARBON	1K 5% 1/6W	R305	1-247-831-00	CARBON	1K 5% 1/6W
R232	1-247-879-00	CARBON	100K 5% 1/6W	R306	1-247-831-00	CARBON	1K 5% 1/6W
R234	1-247-831-00	CARBON	1K 5% 1/6W	R307	1-247-831-00	CARBON	1K 5% 1/6W
R235	1-247-847-00	CARBON	4.7K 5% 1/6W	R308	1-247-819-00	CARBON	330 5% 1/6W
R236	1-247-877-00	CARBON	82K 5% 1/6W	R309	1-247-837-00	CARBON	1.8K 5% 1/6W
R237	1-247-903-00	CARBON	1M 5% 1/6W	R310	1-247-853-00	CARBON	8.2K 5% 1/6W
R238	1-247-855-00	CARBON	10K 5% 1/6W	R313	1-247-815-00	CARBON	220 5% 1/6W
R239	1-247-853-00	CARBON	8.2K 5% 1/6W	R314	1-247-831-00	CARBON	1K 5% 1/6W
R240	1-247-887-00	CARBON	220K 5% 1/6W	R315	1-247-841-00	CARBON	2.7K 5% 1/6W
R241	1-247-887-00	CARBON	220K 5% 1/6W	R316	1-247-841-00	CARBON	2.7K 5% 1/6W
R242	1-247-827-00	CARBON	680 5% 1/6W	R317	1-247-865-00	CARBON	27K 5% 1/6W
R243	1-247-879-00	CARBON	100K 5% 1/6W	R318	1-247-813-00	CARBON	180 5% 1/6W
R244	1-247-879-00	CARBON	100K 5% 1/6W	R319	1-247-831-00	CARBON	1K 5% 1/6W
R245	1-247-831-00	CARBON	1K 5% 1/6W	R320	1-247-881-00	CARBON	120K 5% 1/6W
R246	1-247-831-00	CARBON	1K 5% 1/6W	R321	1-247-857-00	CARBON	12K 5% 1/6W
R252	1-247-855-00	CARBON	10K 5% 1/6W	R322	1-247-855-00	CARBON	10K 5% 1/6W
R253	1-247-855-00	CARBON	10K 5% 1/6W	R323	1-247-837-00	CARBON	1.8K 5% 1/6W
R254	1-247-851-00	CARBON	6.8K 5% 1/6W	R324	1-247-825-00	CARBON	560 5% 1/6W
R256	1-247-881-00	CARBON	120K 5% 1/6W	R325	1-247-821-00	CARBON	390 5% 1/6W
R257	1-247-831-00	CARBON	1K 5% 1/6W	R326	1-247-849-00	CARBON	5.6K 5% 1/6W
R258	1-247-831-00	CARBON	1K 5% 1/6W	R327	1-247-831-00	CARBON	1K 5% 1/6W
R259	1-247-855-00	CARBON	10K 5% 1/6W	R328	1-247-857-00	CARBON	12K 5% 1/6W
R260	1-247-875-00	CARBON	68K 5% 1/6W	R331	1-247-877-00	CARBON	82K 5% 1/6W

D

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R332	1-247-825-00	CARBON	560 5% 1/6W	R515	1-247-888-00	CARBON	240K 5% 1/6W
R333	1-247-853-00	CARBON	8.2K 5% 1/6W	R516	1-212-361-00	METAL OXIDE	1.2 5% 1W F
R334	1-247-840-00	CARBON	2.4K 5% 1/6W	R517	1-247-853-00	CARBON	8.2K 5% 1/6W
R335	1-247-859-00	CARBON	15K 5% 1/6W	R518	1-247-851-00	CARBON	6.8K 5% 1/6W
R336	1-247-855-00	CARBON	10K 5% 1/6W	R519	1-247-857-00	CARBON	12K 5% 1/6W
R337	1-247-855-00	CARBON	10K 5% 1/6W	R520	1-247-855-00	CARBON	10K 5% 1/6W
R338	1-247-831-00	CARBON	1K 5% 1/6W	R521	1-212-891-00	FUSIBLE	270 5% 1/4W F
R339	1-247-831-00	CARBON	1K 5% 1/6W	R522	1-247-218-00	CARBON	120 5% 1/2W
R340	1-247-821-00	CARBON	390 5% 1/6W	R523	1-247-825-00	CARBON	560 5% 1/6W
R341	1-247-821-00	CARBON	390 5% 1/6W	R525	1-247-841-00	CARBON	2.7K 5% 1/6W
R343	1-247-879-00	CARBON	100K 5% 1/6W	R526	1-247-895-00	CARBON	470K 5% 1/6W
R344	1-247-863-00	CARBON	22K 5% 1/6W	R527	1-247-845-00	CARBON	3.9K 5% 1/6W
R345	1-247-882-00	CARBON	130K 5% 1/6W	R529	1-247-783-00	CARBON	10 5% 1/6W
R346	1-247-815-00	CARBON	220 5% 1/6W	R530	1-247-841-00	CARBON	2.7K 5% 1/6W
R347	1-247-825-00	CARBON	560 5% 1/6W	R531	1-247-827-00	CARBON	680 5% 1/6W
R348	1-247-827-00	CARBON	680 5% 1/6W	R532	1-247-835-00	CARBON	1.5K 5% 1/6W
R349	1-247-849-00	CARBON	5.6K 5% 1/6W	R533	1-247-877-00	CARBON	82K 5% 1/6W
R350	1-247-853-00	CARBON	8.2K 5% 1/6W	R535	1-247-831-00	CARBON	1K 5% 1/6W
R351	1-247-863-00	CARBON	22K 5% 1/6W	R536	1-247-842-00	CARBON	3K 5% 1/6W
R352	1-247-837-00	CARBON	1.8K 5% 1/6W	R537	1-247-819-00	CARBON	330 5% 1/6W
R353	1-247-843-00	CARBON	3.3K 5% 1/6W	R538	1-213-140-00	METAL OXIDE	560 5% 1W F
R354	1-247-883-00	CARBON	150K 5% 1/6W	R582	1-247-879-00	CARBON	100K 5% 1/6W
R355	1-247-846-00	CARBON	4.3K 5% 1/6W	R591	1-247-839-00	CARBON	2.2K 5% 1/6W
R356	1-247-857-00	CARBON	12K 5% 1/6W	R604	1-205-737-00	CEMENTED	30 10% 7W
R357	1-247-845-00	CARBON	3.9K 5% 1/6W	R605	1-205-728-00	CEMENTED	47 10% 7W
R358	1-247-853-00	CARBON	8.2K 5% 1/6W	R606	1-246-433-00	CARBON	22 5% 1/4W
R359	1-247-845-00	CARBON	3.9K 5% 1/6W	R607	1-207-455-00	WIREDOWN	0.22 10% 1/2W
R360	1-247-879-00	CARBON	100K 5% 1/6W	R608	1-206-660-00	METAL OXIDE	680 5% 2W F
R361	1-247-827-00	CARBON	680 5% 1/6W	R609	1-247-823-00	CARBON	470 5% 1/6W
R362	1-247-839-00	CARBON	2.2K 5% 1/6W	R610	1-247-863-00	CARBON	22K 5% 1/6W
R364	1-247-839-00	CARBON	2.2K 5% 1/6W	R612	1-246-411-00	CARBON	2.7 5% 1/4W
R365	1-247-857-00	CARBON	12K 5% 1/6W	R613	1-247-895-00	CARBON	470K 5% 1/6W
R366	1-247-839-00	CARBON	2.2K 5% 1/6W	R616	1-246-449-00	CARBON	100 5% 1/4W
R367	1-247-815-00	CARBON	220 5% 1/6W	R651	1-212-936-00	FUSIBLE	1.2 5% 1/2W F
R368	1-247-815-00	CARBON	220 5% 1/6W	R652	1-217-653-00	FUSIBLE	0.47 10% 2W
R369	1-247-815-00	CARBON	220 5% 1/6W	R653	1-217-653-00	FUSIBLE	0.47 10% 2W
R370	1-247-823-00	CARBON	470 5% 1/6W	R654	1-217-418-00	FUSIBLE	0.47 10% 1/2W F
R371	1-247-807-00	CARBON	100 5% 1/6W	R655	1-214-777-00	METAL	100K 1% 1/4W
R372	1-247-833-00	CARBON	1.2K 5% 1/6W	R656	1-247-839-00	CARBON	2.2K 5% 1/6W
R373	1-247-831-00	CARBON	1K 5% 1/6W	R657	1-247-863-00	CARBON	22K 5% 1/6W
R374	1-247-897-00	CARBON	560K 5% 1/6W	R658	1-247-827-00	CARBON	680 5% 1/6W
R501	1-247-831-00	CARBON	1K 5% 1/6W	R659	1-247-847-00	CARBON	4.7K 5% 1/6W
R502	1-247-839-00	CARBON	2.2K 5% 1/6W	R660	1-247-826-00	CARBON	620 5% 1/6W
R504	1-247-853-00	CARBON	8.2K 5% 1/6W	R661	1-247-843-00	CARBON	3.3K 5% 1/6W
R505	1-247-839-00	CARBON	2.2K 5% 1/6W	R662	1-247-879-00	CARBON	100K 5% 1/6W
R507	1-247-866-00	CARBON	30K 5% 1/6W	R663	1-247-895-00	CARBON	470K 5% 1/6W
R508	1-247-869-00	CARBON	39K 5% 1/6W	R664	1-247-869-00	CARBON	39K 5% 1/6W
R509	1-247-831-00	CARBON	1K 5% 1/6W	R665	1-247-865-00	CARBON	27K 5% 1/6W
R510	1-247-829-00	CARBON	820 5% 1/6W	R666	1-247-855-00	CARBON	10K 5% 1/6W
R511	1-247-851-00	CARBON	6.8K 5% 1/6W	R667	1-247-859-00	CARBON	15K 5% 1/6W
R512	1-247-805-00	CARBON	82 5% 1/6W	R669	1-246-525-00	CARBON	150K 5% 1/4W
R513	1-247-872-00	CARBON	51K 5% 1/6W	R670	1-247-855-00	CARBON	10K 5% 1/6W
R514	1-202-471-00	SOLID	4.7M 5% 1/4W	R671	1-247-843-00	CARBON	3.3K 5% 1/6W

D J1 N

Ref.No.	Part No.	Description		Remark	Ref.No.	Part No.	Description		Remark				
R672	1-247-837-00	CARBON	1.8K	5%	1/8W	F	•:1-611-170-00	J1 BOARD	*****				
R674	1-213-149-00	METAL OXIDE	3.3	5%	1W	F							
R675	1-214-749-00	METAL	6.8K	1%	1/4W								
R676	1-214-753-00	METAL	10K	1%	1/4W								
R801	1-247-807-00	CARBON	100	5%	1/6W								
R802	1-247-827-00	CARBON	680	5%	1/6W								
R803	1-247-803-00	CARBON	68	5%	1/6W								
R804	1-213-147-00	METAL OXIDE	2.2K	5%	1W	F							
R805	1-213-146-00	METAL OXIDE	1.8K	5%	1W	F	R901	1-246-465-00	CARBON	470	5%	1/4W	
R806	1-202-838-00	SOLID	100K		1/2W		R902	1-246-465-00	CARBON	470	5%	1/4W	
R807	1-202-818-00	SOLID	1K		1/2W					*****			
R808	1-202-826-00	SOLID	4.7K		1/2W								
R809	1-244-924-00	CARBON	130K	5%	1/2W								
R810	1-210-859-00	CARBON	1.2	5%	1/8W	F	•:1-606-794-00	N BOARD	*****				
R811	1-212-936-00	FUSIBLE	1.2	5%	1/2W	F							
R812	1-247-863-00	CARBON	22K	5%	1/6W		•:4-342-117-00	CASE, SHIELD (MAIN), R					
R814	1-217-212-00	WIREWOUND	10	10%	2W	F	•:4-342-118-00	LID, SHIELD CASE, R					
R815	1-206-658-00	METAL OXIDE	560	5%	2W	F							
R817	1-206-459-00	METAL OXIDE	6.8	5%	2W	F							
R818	1-247-791-00	CARBON	22	5%	1/8W	F							
R820	1-217-220-00	WIREWOUND	47	10%	2W	F							
R821	1-210-825-00	SOLID	3.3M	5%	1/4W								
R822	1-247-889-00	CARBON	270K	5%	1/6W								
R823	1-247-889-00	CARBON	270K	5%	1/6W								
R824	1-207-616-00	WIREWOUND	0.47	10%	2W	F							
R825	1-213-144-00	METAL OXIDE	1.2K	5%	1W	F							
		VARIABLE RESISTOR											
RV251	1-228-727-00	RES, ADJ, CERAMIC	CARBON	47K									
RV301	1-228-720-00	RES, ADJ, CERAMIC	CARBON	1K									
RV302	1-228-724-00	RES, ADJ, CERAMIC	CARBON	10K									
RV303	1-228-725-00	RES, ADJ, CERAMIC	CARBON	22K									
RV501	1-228-723-00	RES, ADJ, CERAMIC	CARBON	4.7K									
RV502	1-228-728-00	RES, ADJ, CERAMIC	CARBON	100K									
RV651	1-228-720-00	RES, ADJ, CERAMIC	CARBON	1K									
		SPARK GAP											
SG801	1-519-063-XX	DISCHARGING GAP											
		TRANSFORMER											
T301	1-426-121-00	DAT											
T602	△.1-421-412-00	COIL, FERRITE											
T604	△.1-437-147-00	TRANSFORMER, FERRITE											
T605	1-437-079-00	TRANSFORMER, HORIZONTAL DRIVE											
T606	△.1-421-632-00	TRANSFORMER, FERRITE (SRT)											
T607	△.1-421-624-00	TRANSFORMER, CURRENT											
T801	△.1-437-149-00	TRANSFORMER, HORIZONTAL DRIVE											
T802	△.1-439-332-00	TRANSFORMER ASSY, FLYBACK											
T891	1-421-634-00	TRANSFORMER, FERRITE (V.PCT)											
		CRYSTAL											
X301	1-527-789-00	VINRATOR, CRYSTAL											

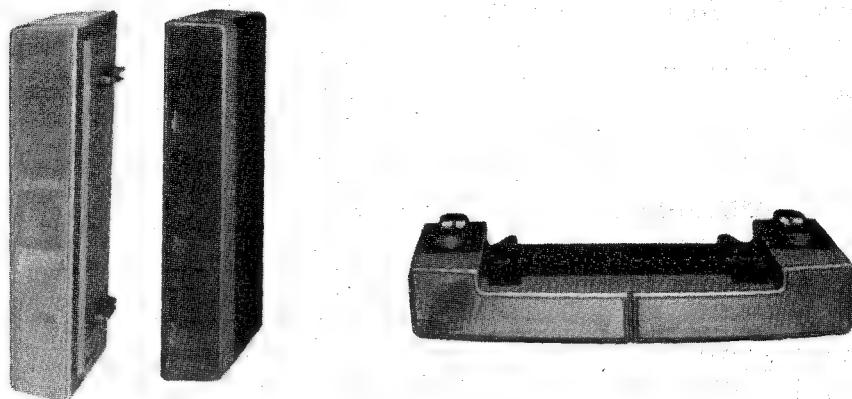
The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
ACCESSORIES AND PACKING MATERIALS			

A-1470-625-A		COMMANDER ASSY RM-653	
X-4361-913-0		BAND ASSY	
2-373-803-00		WRENCH, HEXAGON ROD (FOR KV-2722EC2)	
2-373-807-00		SCREW, CAP (FOR KV-2722EC2)	
4-363-009-00		CUSHION (SPEAKER) (ASSY) (FOR KV-2722EC2)	
4-363-613-00		CUSHION (UPPER) (ASSY)	
4-363-614-00		CUSHION (LOWER) (ASSY)	
4-363-615-00		CUSHION (SPEAKER) (ASSY) (FOR KV-2724EC2)	
4-363-617-00		TRAY	
4-363-667-00		INDIVIDUAL CARTON (FOR KV-2720EC2)	
4-363-668-00		INDIVIDUAL CARTON (FOR KV-2722EC2)	
4-363-669-00		INDIVIDUAL CARTON (FOR KV-2724EC2)	
4-491-718-01		SCHEMATIC DIAGRAM (B2)	
4-493-847-11		MANUAL, INSTRUCTION	
6-047-001-00		HANDLE	

SS-2722/2724

SERVICE MANUAL



November, 1983

SPEAKER SYSTEM
SONY®

EXPLODED VIEW

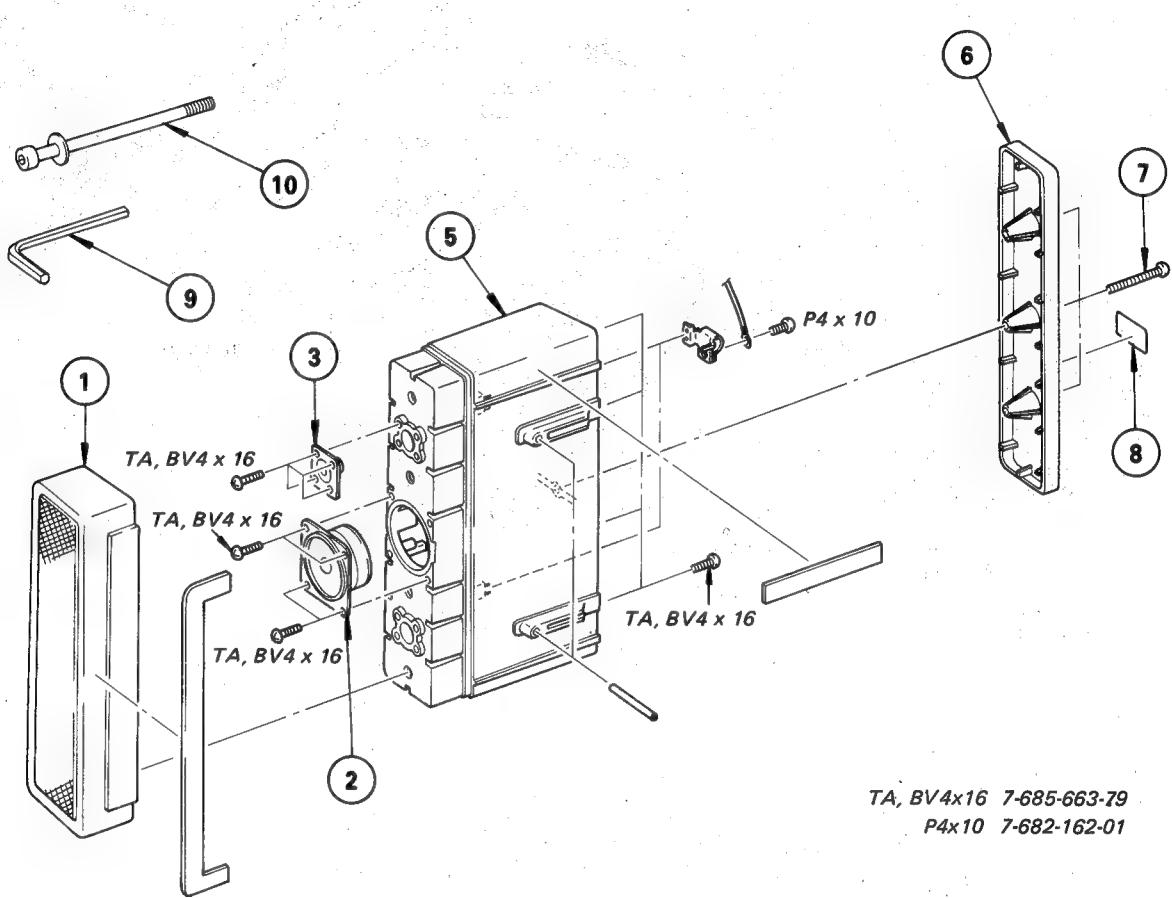
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

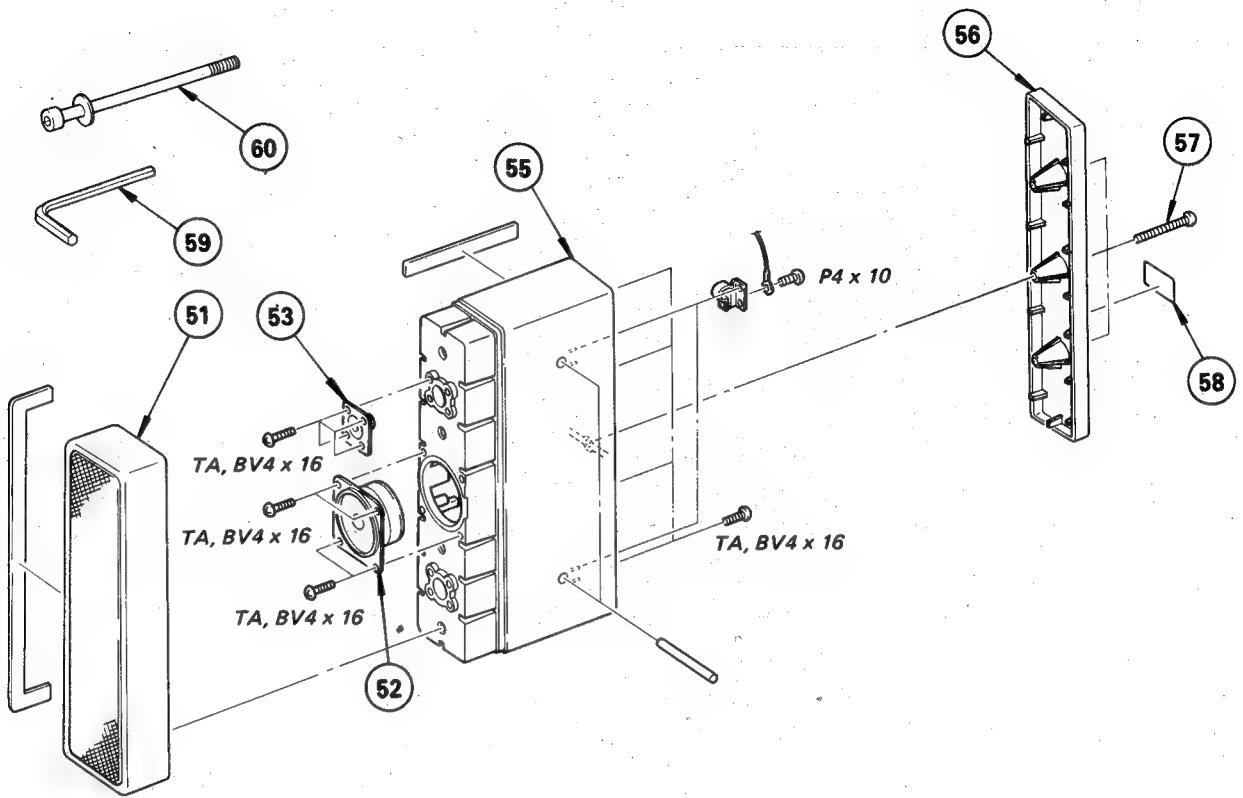
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

SS-2722 (LEFT)



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	X-2373-802-0	PANEL (SPEAKER SIDE) ASSY, FRONT		6	2-373-813-00	PANEL (SPEAKER SIDE) REAR, LEFT	
2	1-503-188-00	SPEAKER		7	4-355-242-11	SCREW, TAPPING, +P	
3	1-503-189-00	SPEAKER		8	▲:2-373-818-00	LABEL, MODEL NUMBER (LEFT)	
5	2-373-810-00	BOX (SIDE), SPEAKER		9	2-373-803-00	WRENCH, HEXAGON ROD	
				10	2-373-807-00	SCREW, CAP	

SS-2722 (RIGHT)



TA, BV4x16 7-685-663-79
P4x10 7-682-162-01

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	X-2373-802-0	PANEL (SPEAKER.SIDE) ASSY, FRONT		56	2-373-811-00	PANEL (SPEAKER.SIDE) REAR, RIGHT	
52	1-503-188-00	SPEAKER		58	▲:2-373-817-00	LABEL, MODEL NUMBER (RIGHT)	
53	1-503-189-00	SPEAKER		57	4-355-242-11	SCREW, TAPPING, +P	
55	2-373-810-00	BOX (SIDE), SPEAKER		59	2-373-803-00	WRENCH, HEXAGON ROD	
				60	2-373-807-00	SCREW,CAP	

ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

CAPACITORS
• MF : μ F, PF : $\mu\mu$ F

Ref.No.	Part No.	Description	Remark
---------	----------	-------------	--------

MISCELLANEOUS

C901	1-119-195-00	CAP,ELEC	1MF
C902	1-119-195-00	CAP,ELEC	1MF
SP901	1-503-189-00	SPEAKER	
SP902	1-503-188-00	SPEAKER	
SP903	1-503-188-00	SPEAKER	
SP904	1-503-189-00	SPEAKER	

ACCESSORIES AND PACKING MATERIALS

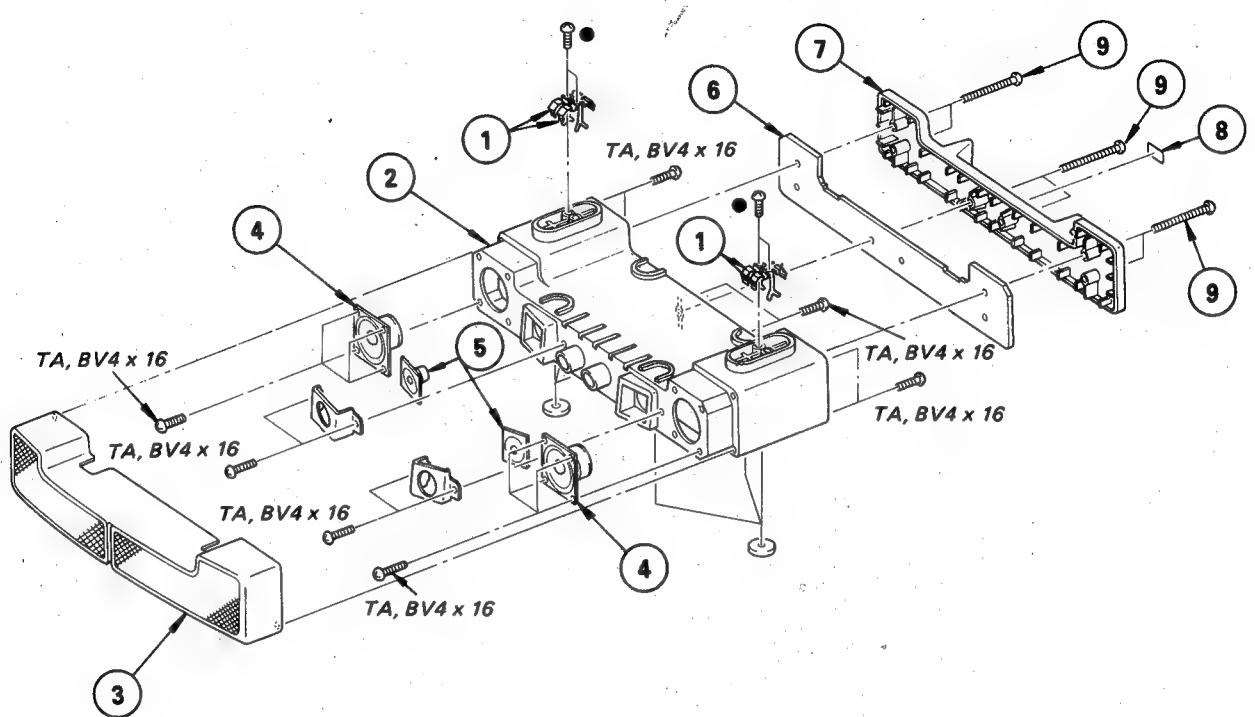
Part No.	Description	Remark
----------	-------------	--------

2-373-803-01	WRENCH, HEXAGON ROD	
2-373-807-01	SCREW, CAP	
4-463-668-00	INDIVIDUAL CARTON	
4-363-009-00	CUSHION (SPEAKER ASSY)	
4-493-847-11	MANUAL, INSTRUCTION	

EXPLODED VIEW

SS-2724

- : TA, BV3x12 7-685-648-71
- TA, BV4x16 7-685-663-79



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	•:2-373-701-00	TERMINAL, SPEAKER		6	2-373-702-00	BOARD, REAR	
2	2-373-707-00	BOX, SPEAKER		7	2-373-708-00	PANEL, REAR	
3	X-2373-701-0	PANEL ASSY, FRONT		8	•:2-373-711-00	LABEL, MODEL NUMBER	
4	1-503-188-00	SPEAKER		9	4-355-242-11	SCREW, TAPPING, +P	
5	1-503-189-00	SPEAKER					

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "•" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

CAPACITORS

• MF : μ F, PF : $\mu\mu$ F

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
----------------	-----------------	--------------------	---------------

MISCELLANEOUS

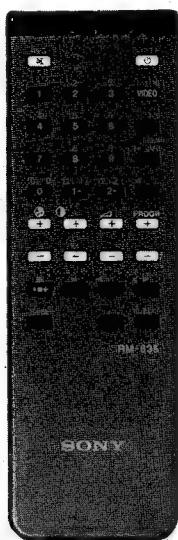
C901	1-119-195-00	CAP,ELEC	1MF
C902	1-119-195-00	CAP,ELEC	1MF
SP901	1-503-189-00	SPEAKER	
SP902	1-503-188-00	SPEAKER	
SP903	1-503-188-00	SPEAKER	
SP904	1-503-189-00	SPEAKER	

ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
4-363-615-00	CUSHION (SPEAKER) (ASSY)	
4-363-669-00	INDIVIDUAL CARTON	
4-493-847-11	MANUAL, INSTRUCTION	

RM-635

SERVICE MANUAL



November, 1983

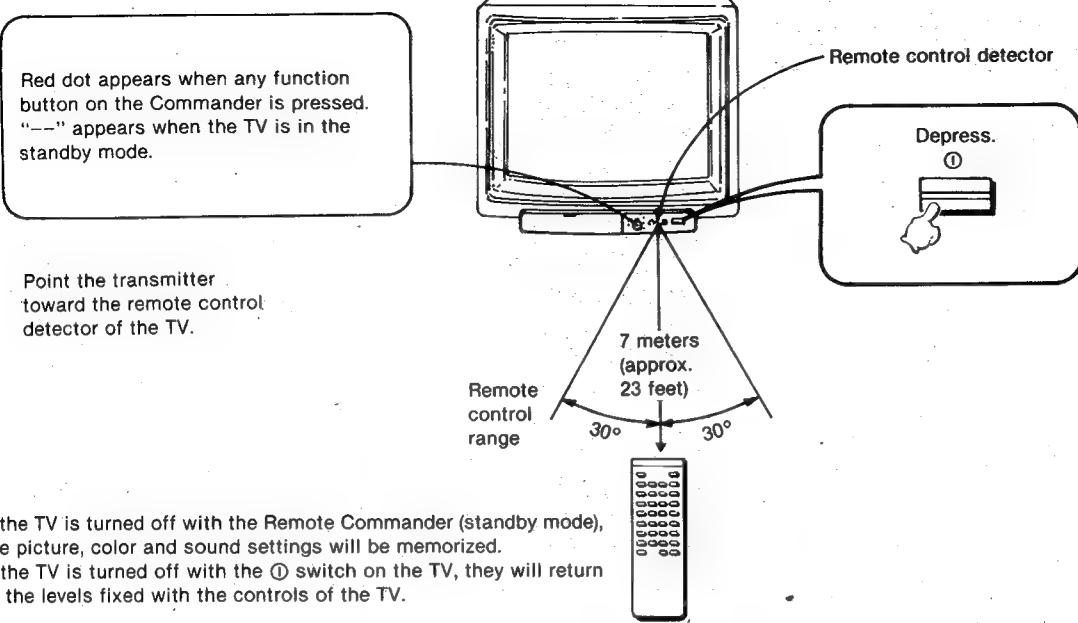
SPECIFICATIONS

Remote control system	Infrared control
Power requirements	3 V dc 2 batteries IEC designation R03 (size AAA)
Dimensions	Approx. 54 x 16 x 165 mm (w/h/d)
Weight	Approx. 100 g incl. batteries
Accessories supplied	IEC designation R03 battery (2)

Design and specifications are subject to change without notice.

REMOTE COMMANDER
SONY®

1. REMOTE TV OPERATION



FUNCTION OF THE BUTTONS ON THE REMOTE COMMANDER

Each button has different functions for normal TV, teletext and VTR operations.

Functions for operating the TV are indicated in white or black.

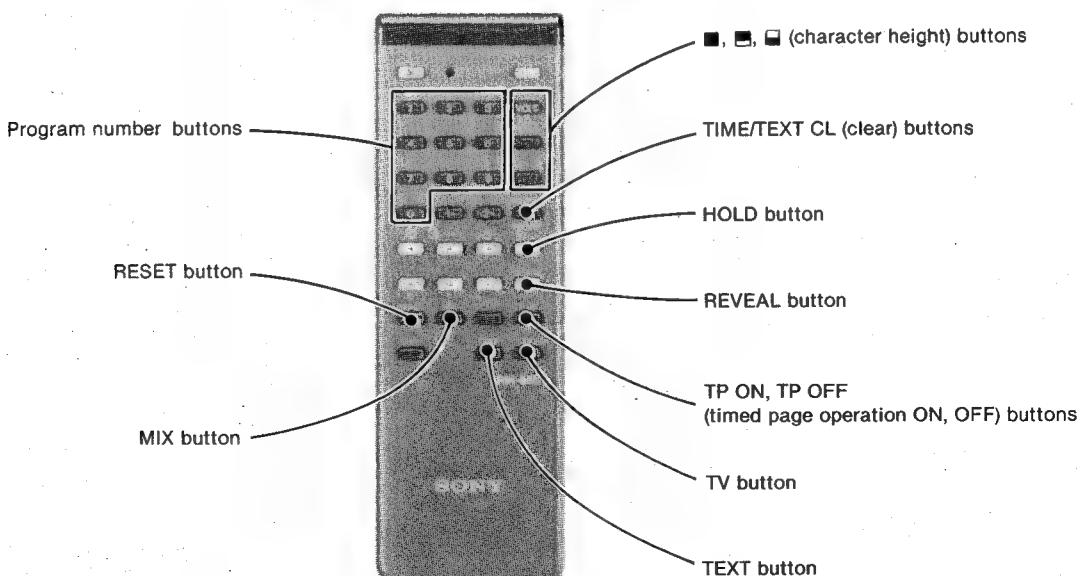
Functions for operating the video tape recorder* are indicated in brown.

Functions for teletext operation using the optional OPK-203 teletext adaptor are indicated in green.

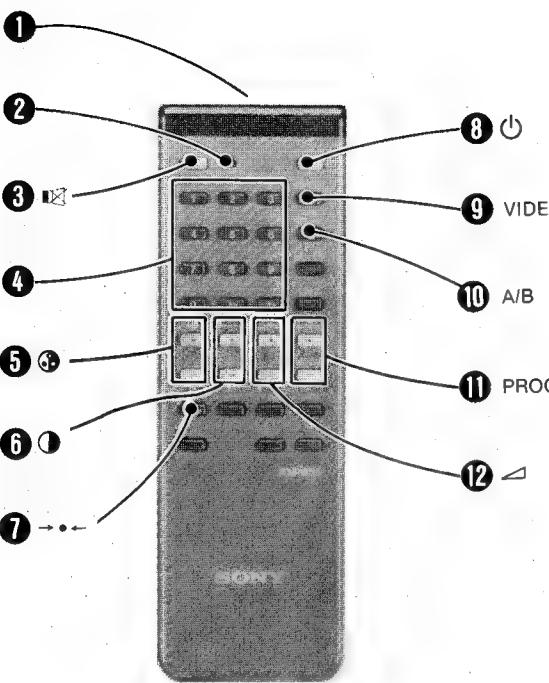
* This Remote Commander can control the Sony SL-F1E combined with the TT-F1 series tuner timer unit, and Sony SL-C9 series.

Buttons used for teletext operations

The following functions are for operating the TV as a teletext display by installing the optional Sony OPK-203 teletext adaptor. For details, please consult a dealer prepared to install a teletext adaptor.



Buttons used for normal TV operation



① Transmitter

Point towards the remote control detector.

② Pilot lamp

Lights when any button on the Remote Commander is pressed. If the lamp does not light when the button is pressed, battery replacement is required.

③ Mute (sound mute) button

When you want to mute the sound (to answer the telephone, for instance), press this button. To restore the sound, press this button again.

④ Program number buttons

Programs are displayed by pressing the corresponding numbers. For programs 1 through 9, press the appropriate single-digit button.

For programs 10 through 19, press the **1-** button (the tens-digit "1" will blink on the program indicator), then the button corresponding to the last digit of the program number (the tens-digit will now stop blinking). For example:

for program 10, press **1-** and **0**.
for program 11, press **1-** and **1**.

For programs 20 to 29, press the **2-** button and then the single-digit button.

For program 30, press the **0** button.

Note: If you do not press a single-digit button within several seconds after pressing the **1-** or **2-** button, the previous program setting will be automatically recalled.

⑤ ④ (color) buttons

Adjust the color intensity. Press the + button to increase it, or the - button to decrease it.

⑥ ① (picture) buttons

Press the + button to increase the picture contrast, or the - button to decrease it.

⑦ →↔ (normal) button

Press this button once instantly returns the color and contrast settings made with the ④ and ⑤ buttons on the Commander to the factory preset levels.

⑧ Ⓛ (standby) switch

Turns the TV in standby mode. Program indicator will show "—". To turn on the TV from the standby mode, press a program number button or →↔ button on the Commander.

⑨ VIDEO button

This button is not usable for this TV. When this button is pressed, "AU" will momentarily light in the program indicator, but will immediately disappear.

⑩ A/B button

This button is not usable for this TV.

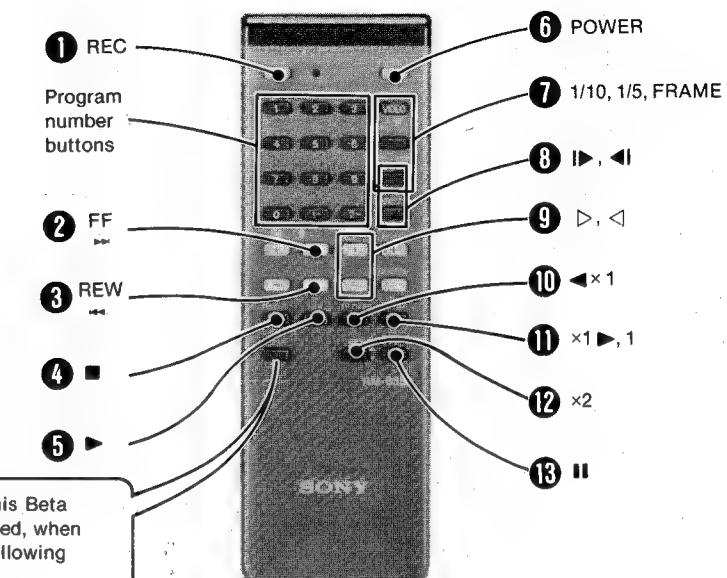
⑪ PROGR (program) buttons

Function the same as the PROGR buttons on the TV.

⑫ ↗ (volume) buttons

Press the + button to increase the volume, or the - button to decrease it.

Buttons used for VTR operations



To operate the VTR, point the transmitter toward the remote control detector of the VTR (SL-C9 series) or the tuner timer unit (TT-F1 series).

Buttons which have the same functions for both SL-C9 series and SL-F1E

① REC (record) button

Press to start recording.

② FF (fast-forward) button

Press to advance the tape rapidly. This button is also used for the forward picture-search operation.

③ REW (rewind) button

Press to rewind the tape. This button is also used for the reverse picture-search operation.

④ ■ (stop) button

Press to stop the tape.

⑤ ▶ (play) button

Press to play the tape back.

⑥ POWER switch

Press to turn the video tape recorder (and the tuner timer unit) on or off.

⑦ ▶x2 (double-speed) button

Functions the same as the x2 button on the video tape recorder. Press to obtain a double-speed playback picture.

⑧ II (pause) button

Functions the same as the II PAUSE button on the SL-C9 series and the PAUSE button on the SL-F1E. To release the pause mode, press this button again.

Buttons used for the SL-C9 series

⑨ Speed control buttons (1/10, 1/5, FRAME)

Function the same as the 1/10, 1/5 and FRAME of the SPEED CONTROL buttons on the recorder.

⑩ ▶ (forward) and ▷ (reverse) buttons

Select the direction of the speed control playback. Function the same as the ▶ and ▷ buttons of the SPEED CONTROL buttons on the recorder.

⑪ 1 (normal speed) button

Functions the same as the 1 button of the SPEED CONTROL buttons on the recorder.

Buttons used for the SL-F1E

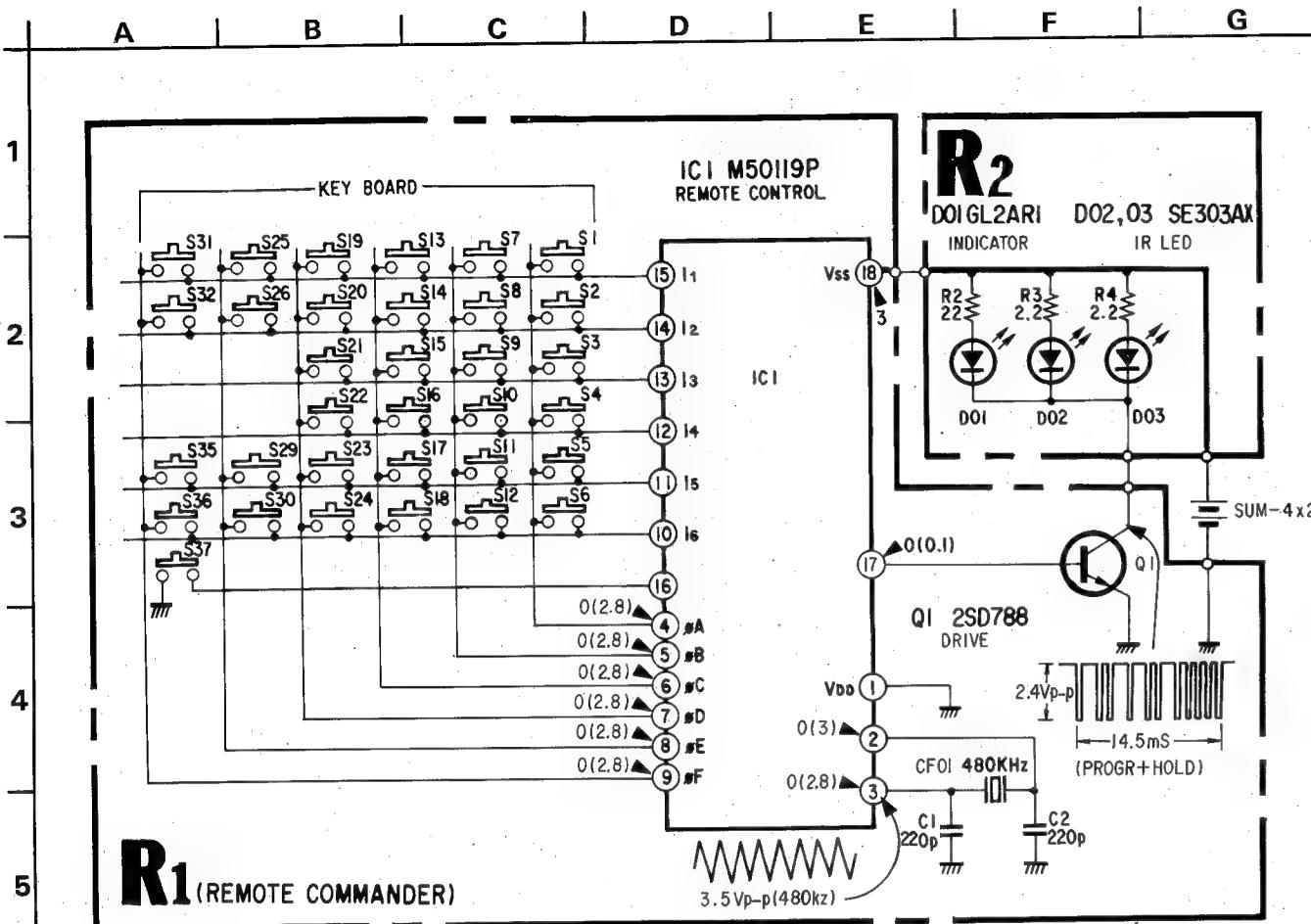
⑫ ▶ (forward slow motion) and ▷ (reverse slow motion) buttons

Function the same as the ▶ and ▷ SWING SEARCH buttons on the SL-F1E.

⑬ ▲x1 (reverse) button and ▲x1 ▶ (forward) button

Function the same as the ▲ and ▶ SWING SEARCH buttons on the SL-F1E.

2. SCHEMATIC DIAGRAM



R1 (REMOTE COMMANDER)

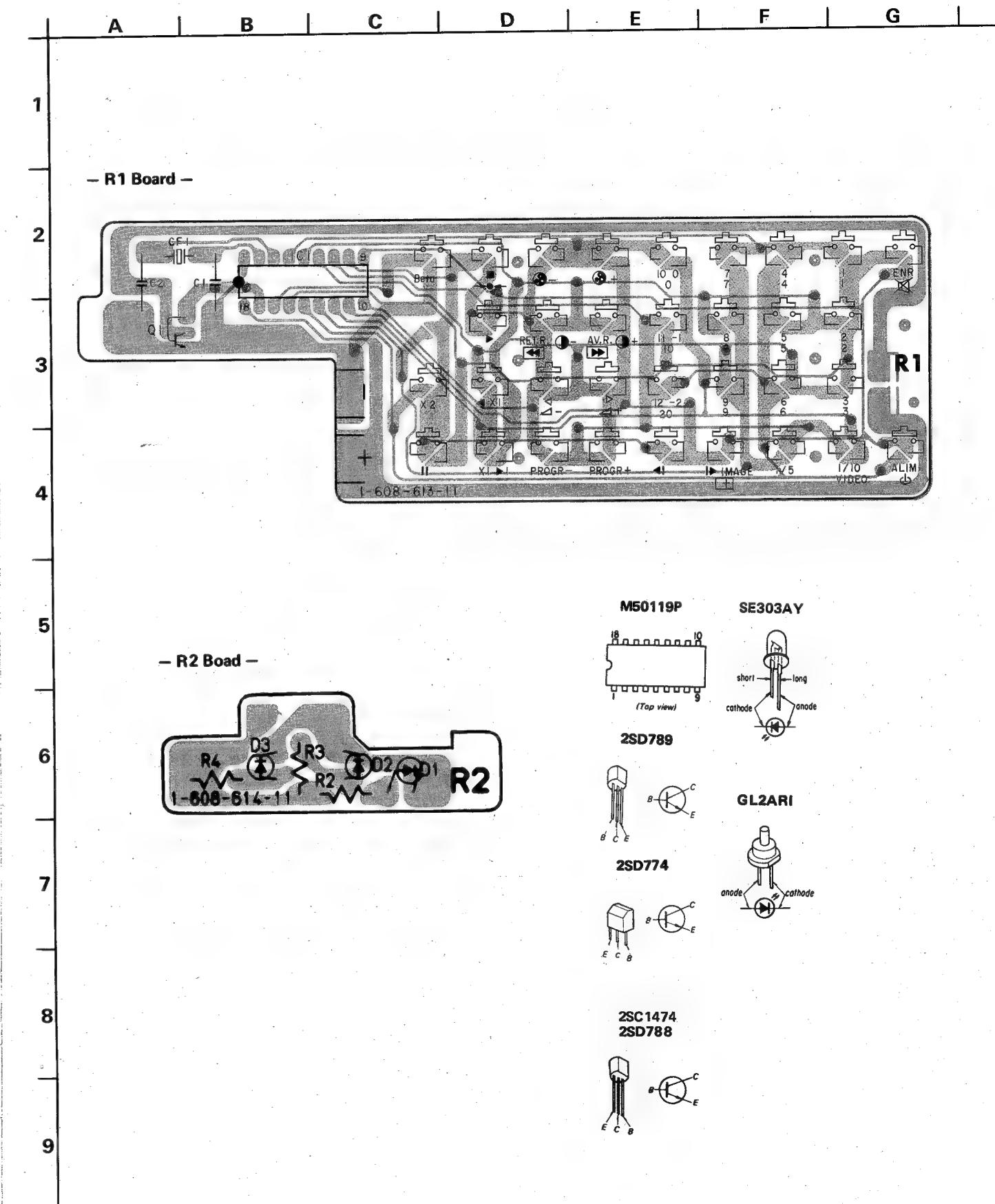
KEY MATRIX

	#A	#B	#C	#D	#E	#F
11	S1	I	S7 2	S13 3	S19 I-	S25 II
12	S2	4	S8 5	S14 6	S20 2-	S26 X.2
13	S3	7	S9 8	S15 9	S21 VIDEO I/O	S27
14	S4 0		S10 XI ▶ I	S16 ▲ XI	S22 A/B	S28
15	S5 +		S11 ▲ +	S17 ● +	S23 PROGR +	S29 ▶
16	S6 -		S12 ▲ -	S18 ● -	S24 PROGR -	S30 →•←
					S37 Beta	S36 ▶

- Voltages and waveform are for when any push button is pressed.
- Voltages in () are taken with button not pressed.
- All capacitors are in μF unless otherwise noted. μF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted.
k: 1000Ω , M: $1000 \text{k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

R1 R2

3. MOUNTING DIAGRAMS

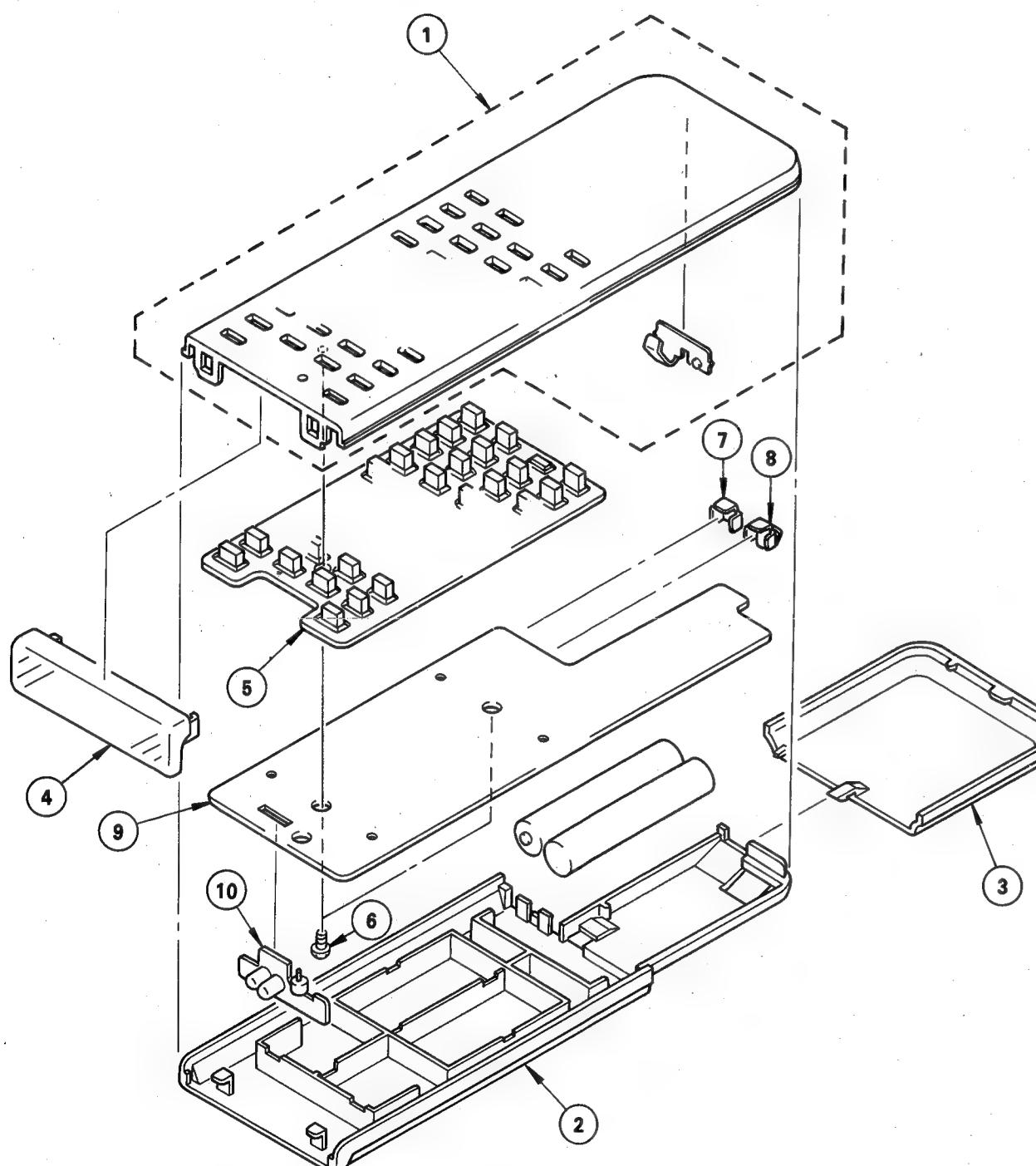


4. EXPLODED VIEW

NOTE

- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	X-4362-211-0	CASE (UPPER) ASSY, COMMANDER		6	4-356-741-00	SCREW, TAPPING (BIND 2X5)	
2	4-361-948-00	CASE (LOWER), COMMANDER		7	4-348-542-00	TERMINAL (A), BATTERY	
3	4-361-945-00	COVER, BATTERY		8	4-348-543-00	TERMINAL (B), BATTERY	
4	4-361-943-00	PANEL, FRONT, COMMANDER		9	4-1-608-613-00	R1 BOARD	
5	4-361-944-21	SHEET, RUBBER		10	4-1-608-614-00	R2 BOARD	

R1 | R2

5. ELECTRICAL PARTS LIST

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - Items marked "█" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAPACITORS

 - MF : μF , PF : $\mu\text{\AA F}$

RESISTORS

 - All resistors are in ohms

When indicating parts by reference number, please include the board name.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
●:1-608-613-00	R1 BOARD *****		
4-348-542-00	TERMINAL (A), BATTERY		
4-348-543-00	TERMINAL (B), BATTERY		
	<u>CAPACITOR</u>		
C01	1-161-315-00	CERAMIC	220PF
C02	1-161-315-00	CERAMIC	220PF
	<u>FILTER</u>		
CF01	1-527-476-00	OSCILLATOR, CERAMIC	
	<u>IC</u>		
IC01	8-759-600-07	IC M50119P	
	<u>TRANSISTOR</u>		
Q01	8-729-378-84	TRANSISTOR 2SD788	

•:1-608-614-00 R2 BOARD

IC

<u>RESISTOR</u>					
R02	1-247-791-00	CARBON	22	5%	1/6W
R03	1-247-767-00	CARBON	2.2	5%	1/6W
R04	1-247-767-00	CARBON	2.2	5%	1/6W

HARDWARE NOMENCLATURE

Screw:

P 3 x 10
L: Length in mm
D: Diameter in mm

Indicated slotted-head only.

Unless otherwise indicated, it means cross-recessed head (Phillips type).



Nut, Washer, Retaining ring:

N 3
Diameter of usable screw or shaft
Reference designation

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

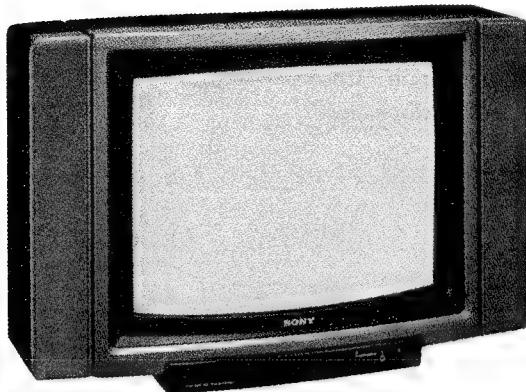
Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation

9-963-197-01

QE-XCHASSIS

ADJUSTMENT MANUAL



April, 1983

KV-2722ET

TABLE OF CONTENTS

1.	SETUP ADJUSTMENTS	
1-1.	BEAM LANDING	2
1-2.	CONVERGENCE	3
1-3.	WHITE BALANCE	3
1-4.	FOCUS	3
2.	CIRCUIT ADJUSTMENTS	
2-1.	D BOARD ADJUSTMENTS	5
2-2.	A BOARD ADJUSTMENTS	7
2-3.	F BOARD ADJUSTMENT	9

Note: The printed diagrams and illustrations used
in this Adjustment Manual are of KV-2722ET.

TRINITRON® COLOR TV
SONY®

CTV



SECTION 1 SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

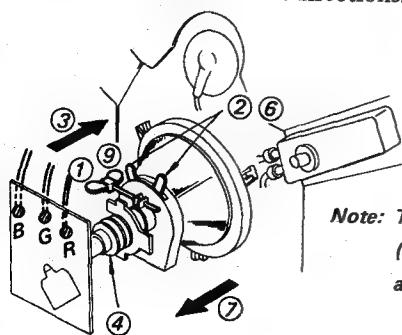
- (picture) control maximum
(Press ● + button)
- ☀ BRIGHTNESS control maximum
(fully clockwise)
- AFT switch ON

1-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Loosen deflection yoke screw.
2. Adjust purity control as shown in Fig. 1-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 1-2.
5. Disconnect leads G and B on the C board.
6. Adjust purity control to center vertical red band as shown in Fig. 1-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.
To get a uniform green screen,
connect lead G on the C board and
disconnect leads R and B.
To get a uniform blue screen,
connect lead B on the C board and
disconnect leads R and G.
After these checks, connect the leads R, G and B.
9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a - d as shown in Fig. 1-4. If mislanding is observed, correct it as shown in Fig. 1-4.
11. Confirm that beam landing is correct when the receiver is faced in all directions.



Note: The circled numbers (1-9) show above steps.

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser

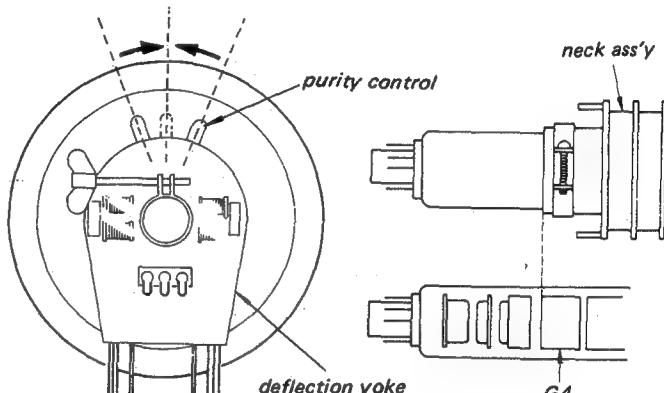


Fig. 1-1.

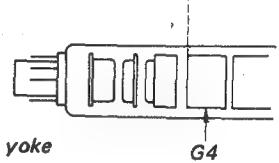


Fig. 1-2.

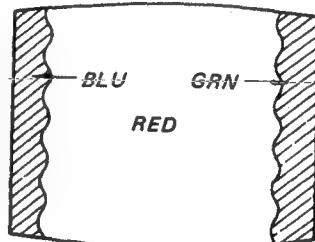


Fig. 1-3.

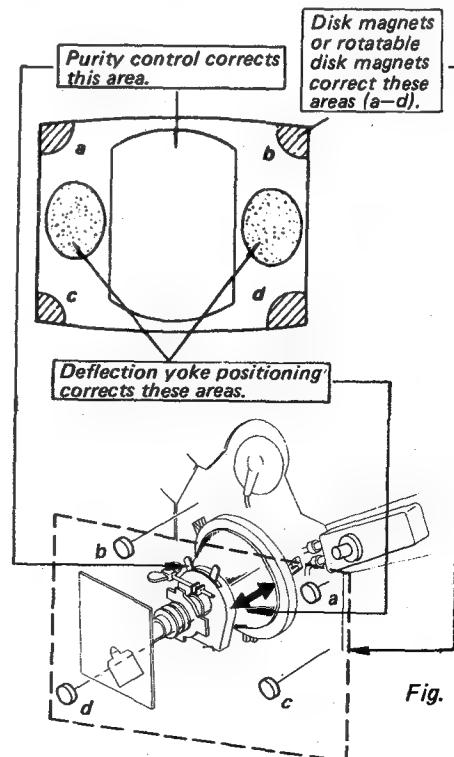
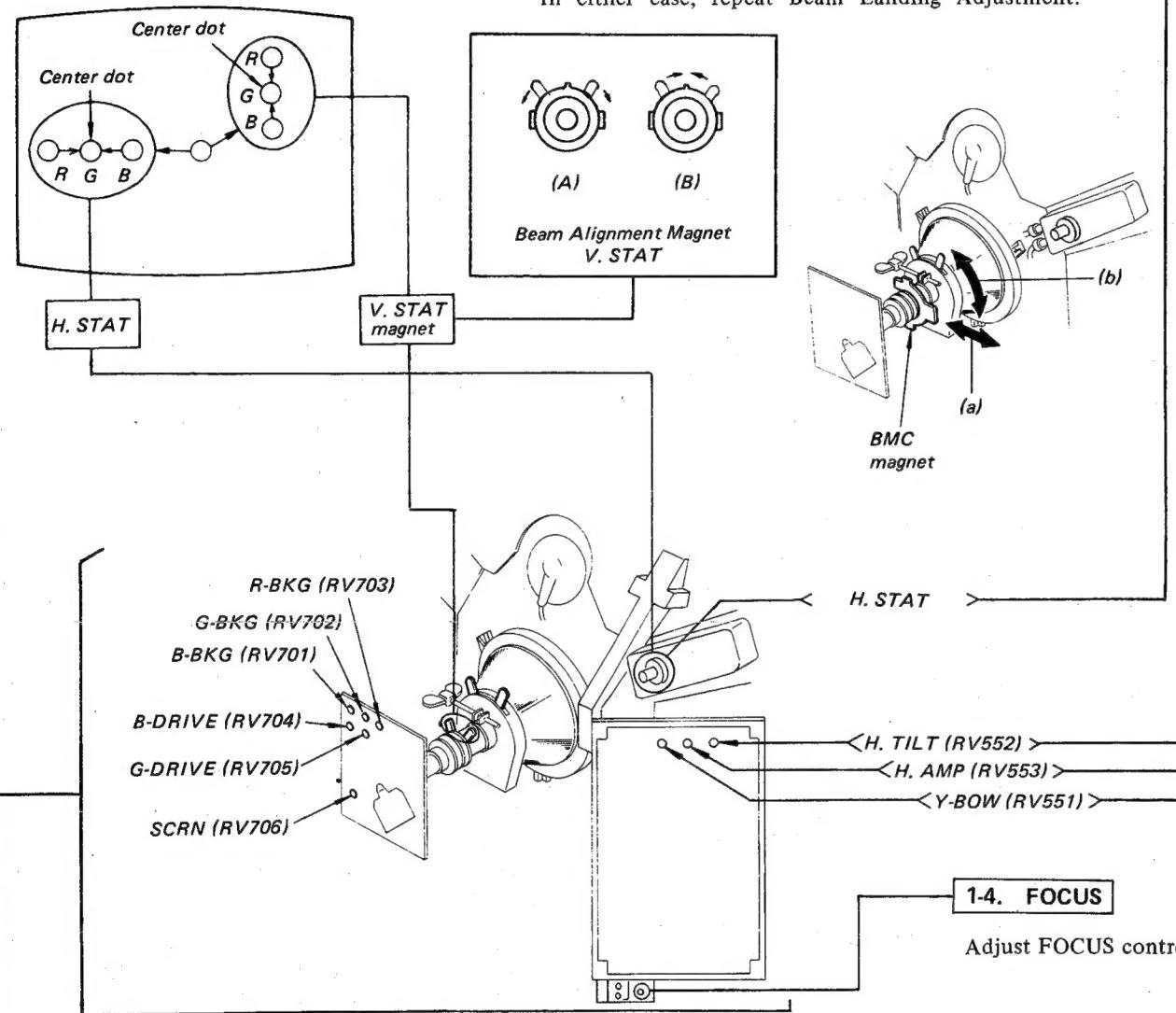


Fig. 1-4.

1-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
 - Turn BRIGHTNESS control fully counterclockwise.
 - Feed in a dot pattern.
- (1) Horizontal and Vertical Static Convergence



1-3. WHITE BALANCE

Feed in a cross-hatch pattern.

1. Turn BRIGHTNESS control fully counterclockwise and press \bullet - (picture) button to obtain a minimum picture position.
2. Turn RV704 (B.DRIVE) and RV705 (G.DRIVE) fully clockwise.
3. Set RV701 (B. BKG), RV702 (G. BKG) and RV703 (R. BKG) to mechanical center.

If blue dot does not coincide with red and green dots, perform following steps.

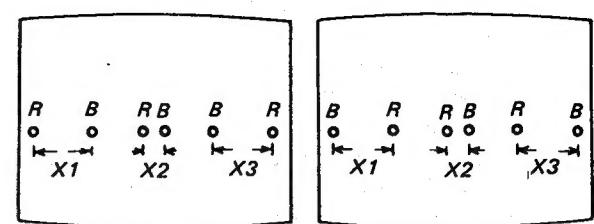
- Move BMC magnet (a) to correct insufficient H. static convergence.
Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

(2) Dynamic Convergence

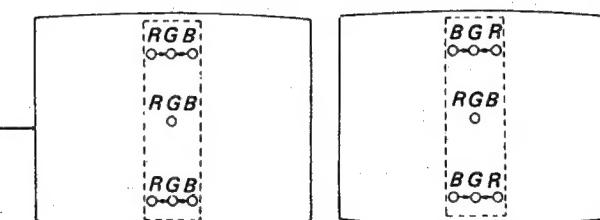
[Misconvergence at Both Sides of Screen.]

1. Set RV552 and RV553 to mechanical center.
2. Adjust H. STAT control so that green and blue dots coincide at center of screen.
3. Adjust RV552 so that X1 is equal to X3.
4. Adjust RV553 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

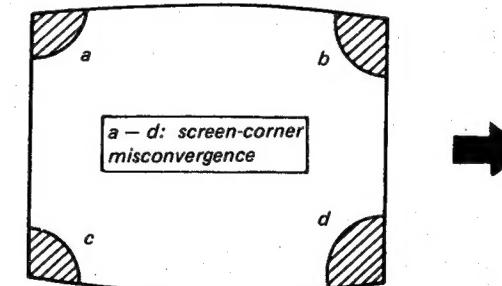


[Top and Bottom Misconvergence]

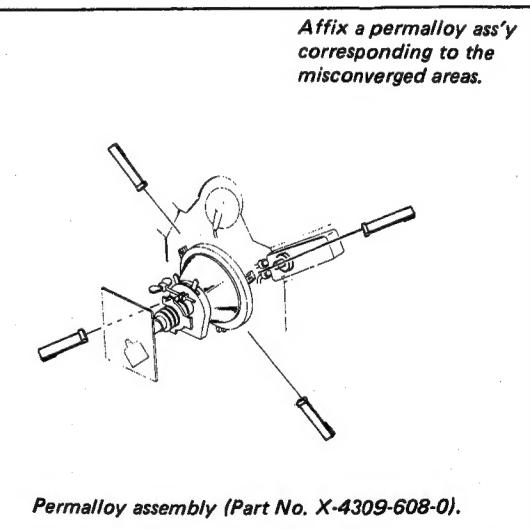
(A)



(3) Screen-corner Convergence



Affix a permalloy ass'y corresponding to the misconverged areas.



Permalloy assembly (Part No. X-4309-608-0).

4. Turn RV706 (SCRН) slowly to obtain a faintly visible cross-hatch. Note the color which first becomes visible by turning RV706. Do not turn a BKG control for this color.
5. Adjust the other two BKG controls for best white balance (neutral gray) of faint cross-hatch.
6. Turn BRIGHTNESS control fully clockwise and press \bullet + (picture) button to obtain a maximum picture position. Observe the screen and adjust the DRIVE control for best white balance.
7. Repeat Steps 1 through 6 several times.

SECTION 2 CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Voltmeter (VOM)
3. Color-bar/pattern generator
4. Television multiplex modulator

(2) INPUT SIGNAL

When making these adjustments, supply a cross-hatch, a color-bar, or an off-air signal.

(3) CONTROL SETTINGS

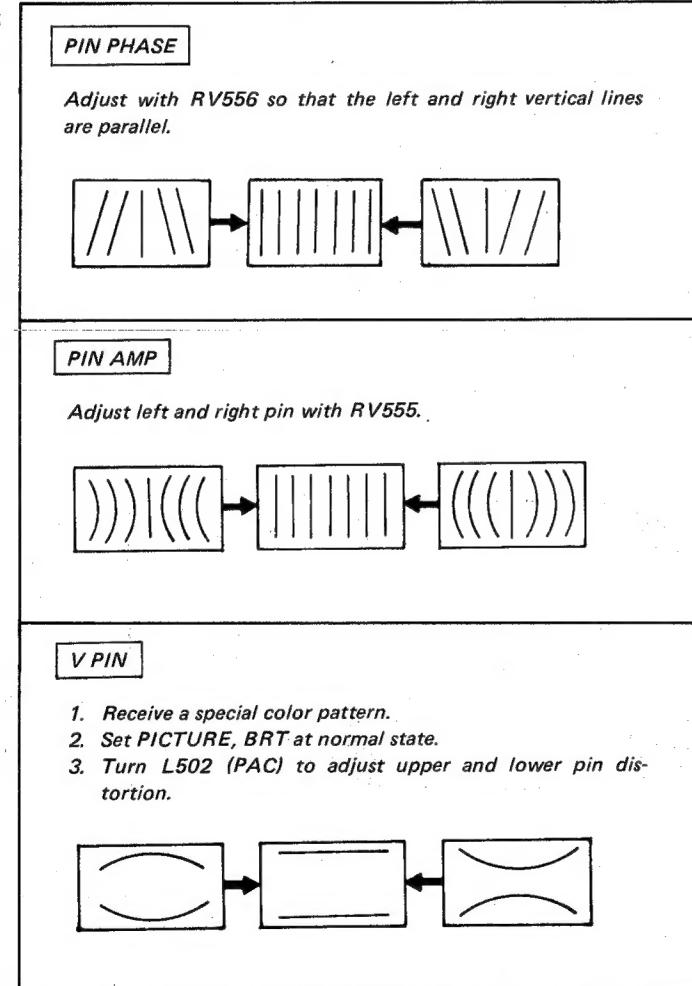
Controls and switch should be set as follows when making checks and adjustments unless otherwise noted.

(picture) control Set for best picture.
 SHARPNESS control }
 (color) control }

BRIGHTNESS control . . . mechanical center
AFT switch . . . ON

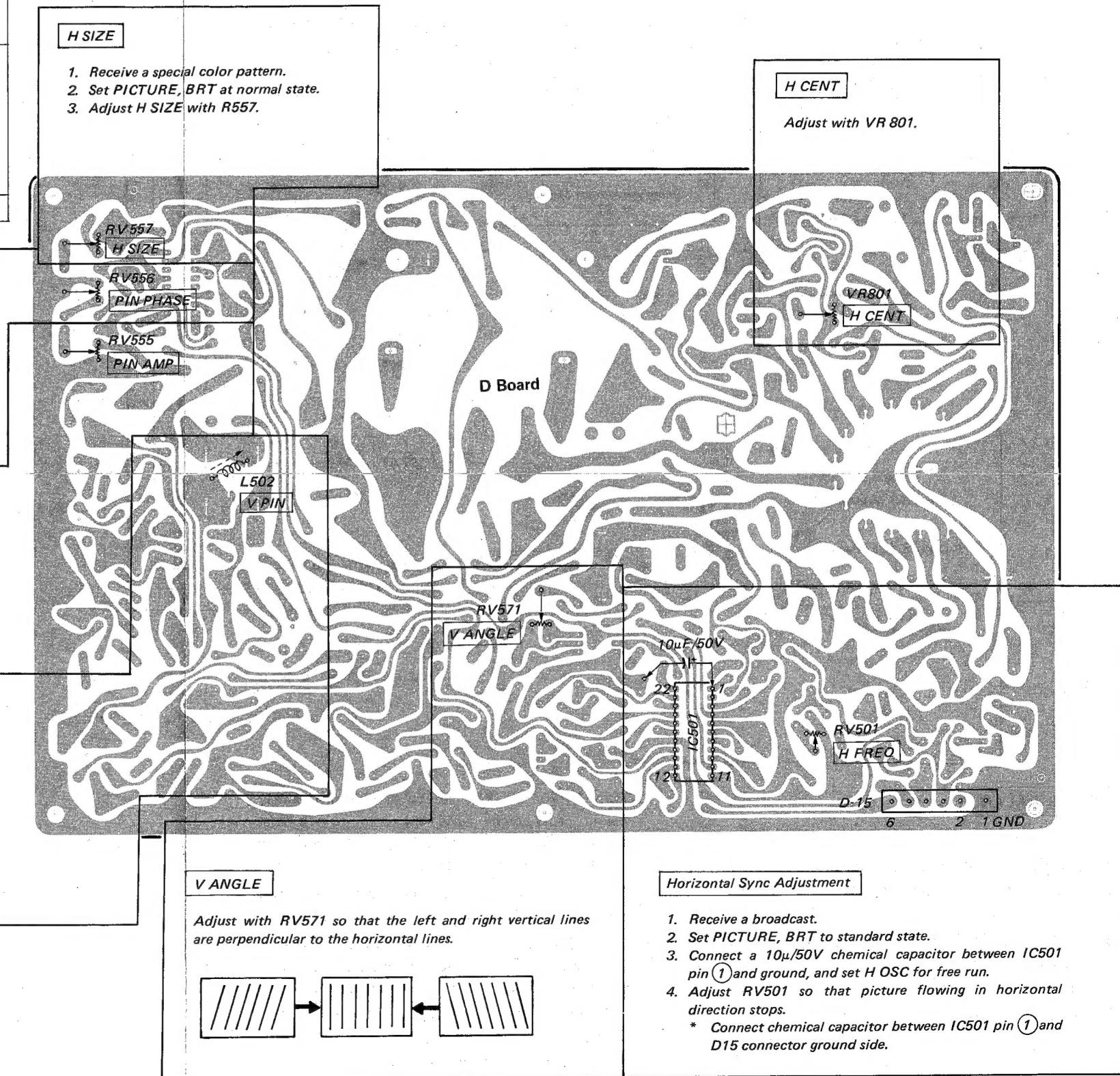
(4) These adjustment should be performed with rated power supply voltage, unless otherwise noted.

2-1. D BOARD ADJUSTMENTS

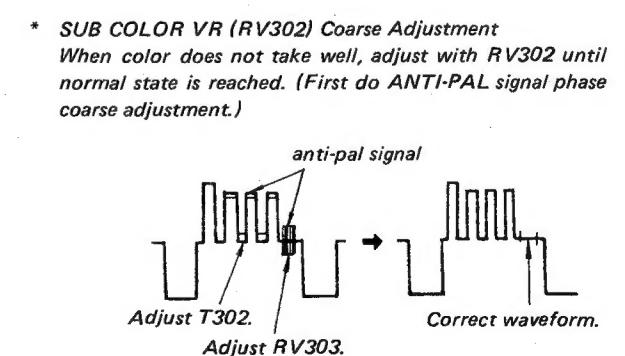
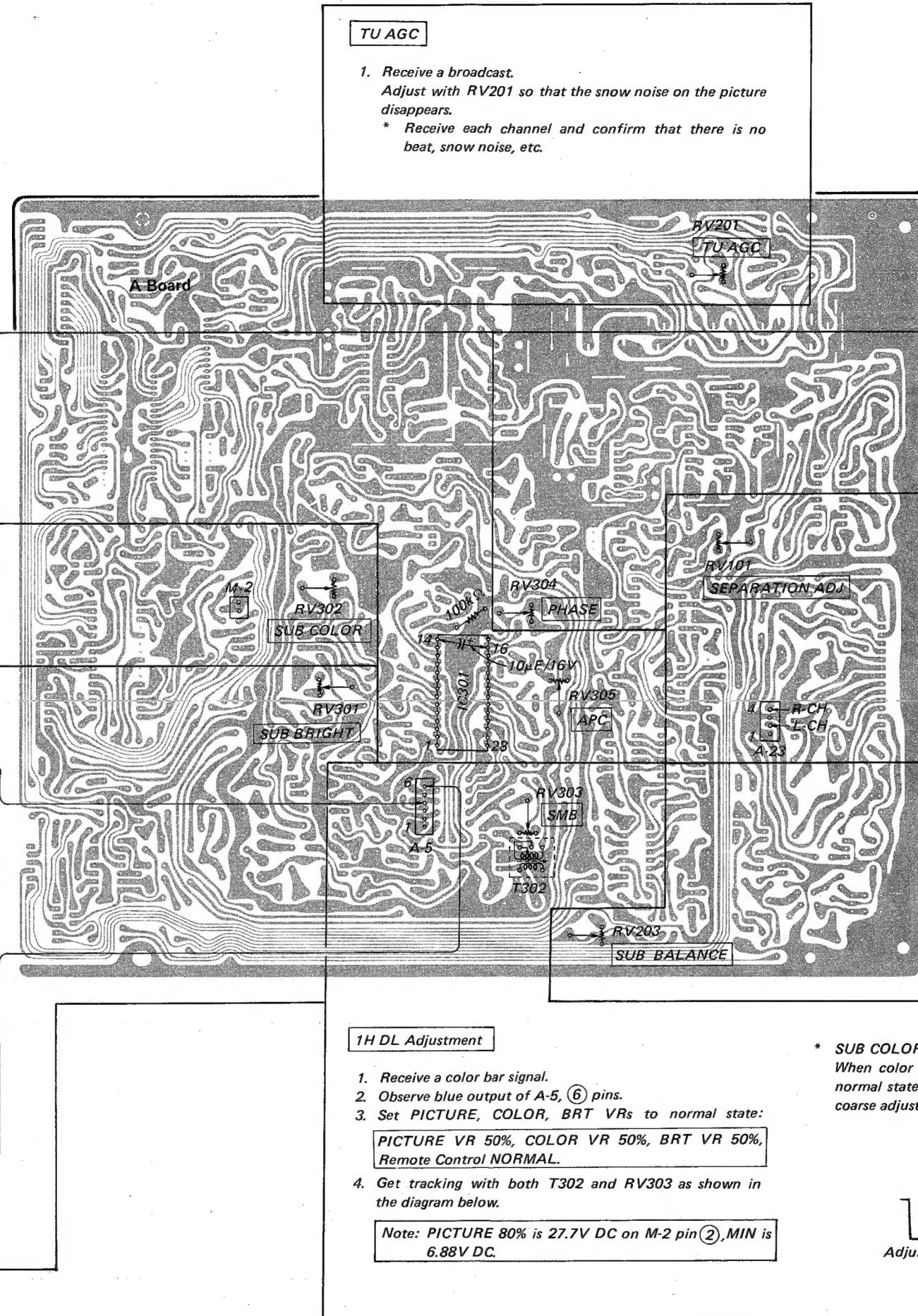
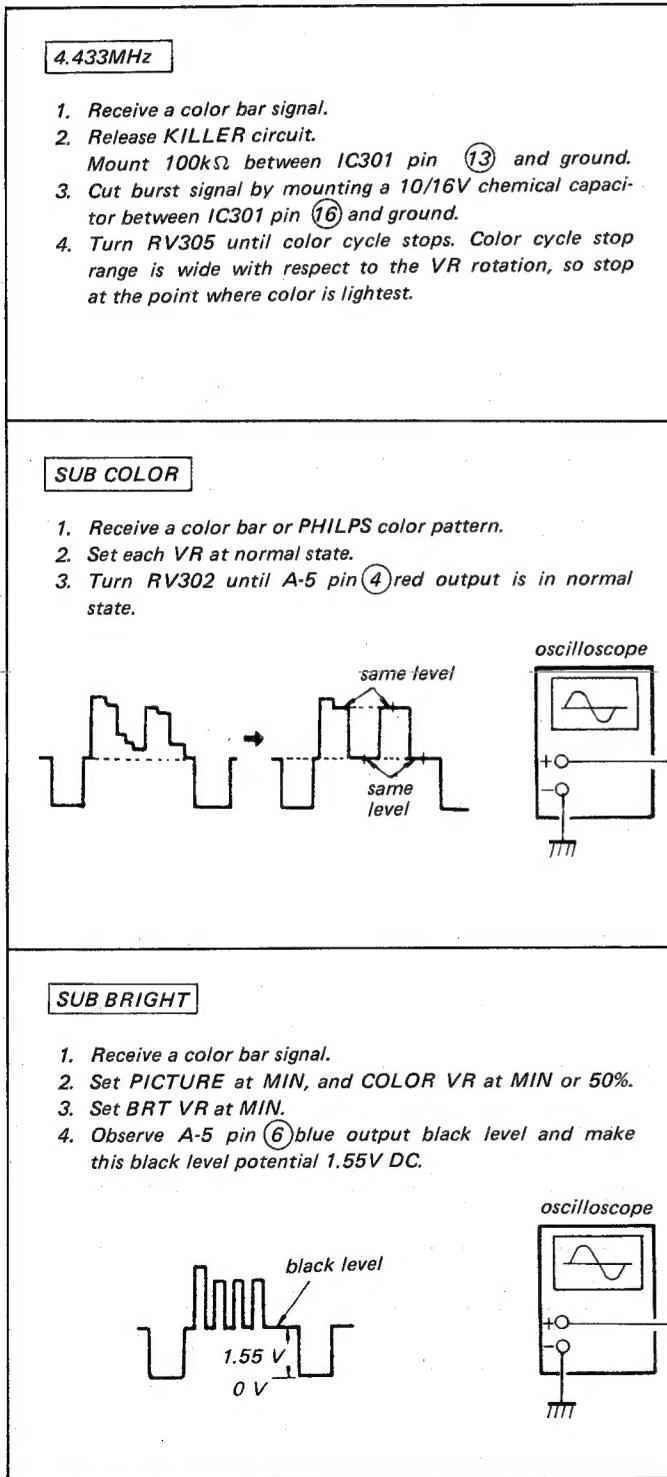


(5) CIRCUIT ADJUSTMENTS

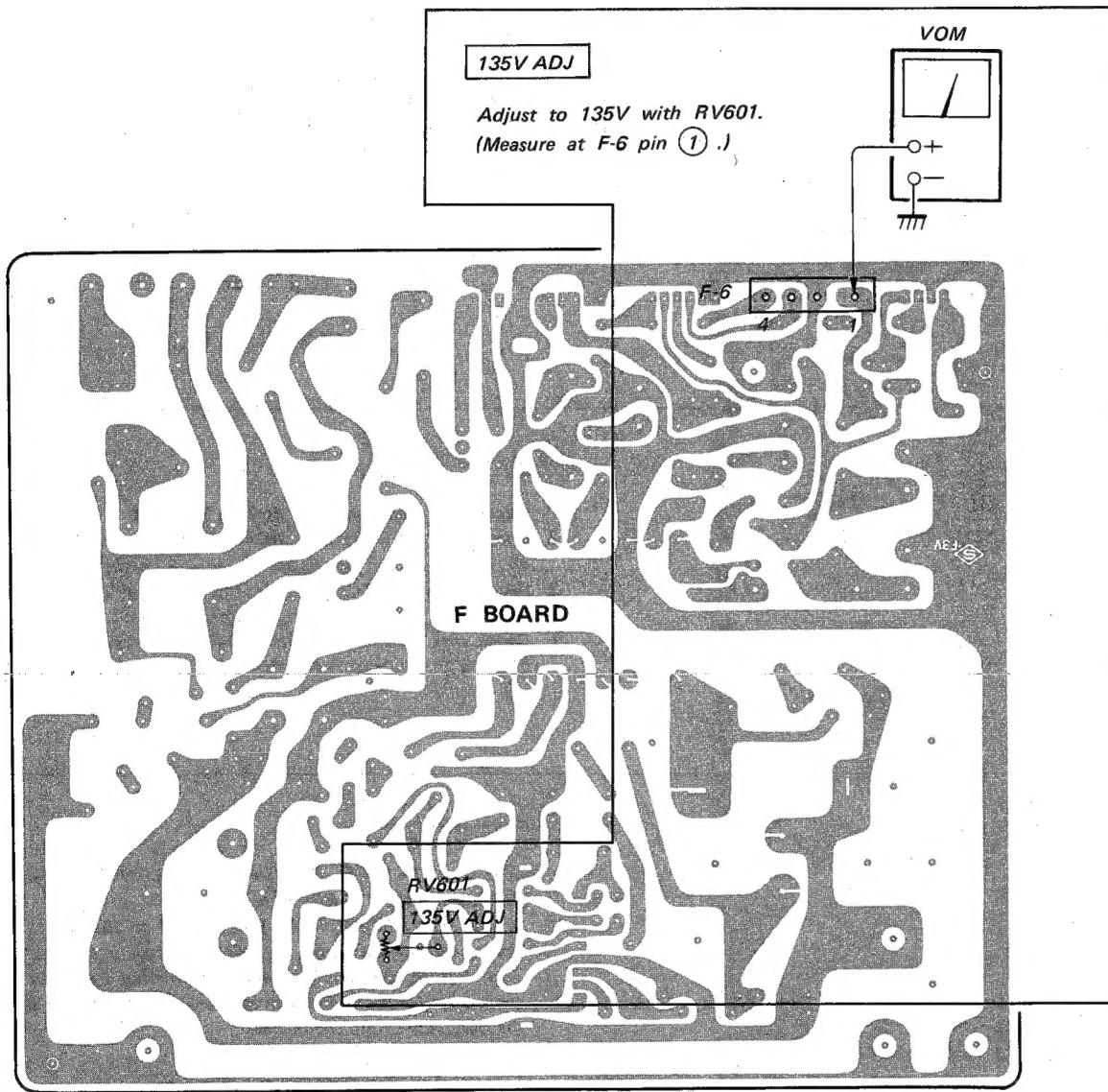
Adjustment	Circuit Board	Page
PIN PHASE		
PIN AMP		
V PIN		
V ANGLE	D	5, 6
H SIZE		
H CENT		
Horizontal Sync ADJ		
TU AGC		
SUB COLOR		
SUB BRIGHT		
SUB BALANCE ADJ		
SEPARATION ADJ	A	7, 8
1H DL ADJ		
CW PHASE		
4.433MHz		
135V ADJ	F	9



2.2. A BOARD ADJUSTMENTS



2-3. F BOARD ADJUSTMENT



MEMO